CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY APPROPRIATIONS, 1954

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

EIGHTY-THIRD CONGRESS

FIRST SESSION

ON

H. R. 5376

MAKING APPROPRIATIONS FOR CIVIL FUNCTIONS ADMINISTERED BY THE DEPARTMENT OF THE ARMY FOR THE FISCAL YEAR ENDING JUNE 30, 1954

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PART 2

(PAGES 1011–2008)

(FRIDAY, MAY 15, THROUGH TUESDAY, MAY 26, 1953)

(SAME INDEX IN PARTS 1 AND 2)

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CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS FOR 1954

FRIDAY, MAY 15, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C

The subcommittee met, at 2 p. m., pursuant to recess, in room F–39, the Capitol, Hon. William F. Knowland (chairman of the subcommittee) presiding.

Present: Senators Knowland, Young, Hayden, Ellender, and McClellan.

CIVIL FUNCTIONS

CALIFORNIA FLOOD CONTROL

STATEMENTS OF C. A. GRIFFITH, CHAIRMAN, STATE WATER RESOURCES BOARD, AND SAM R. LEEDOM, ADMINISTRATIVE ASSISTANT, STATE WATER RESOURCES BOARD, CALIFORNIA

CONSTRUCTION AND PLANNING FUNDS

Senator KNOWLAND. The committee will come to order.

Mr. Griffith, it is nice to have you before our subcommittee again with our Representatives from California.

Mr. GRIFFITH. Thank you, Senator.

Senator KNOWLAND. You may proceed.

Mr. GRIFFITH. Senator Knowland, I think due to the fact that your time is short and the hearing has been allotted only an hour and 15 minutes and that you are thoroughly conversant with the procedure used in California by the water-resources board and the flood-control conference, I will refrain from making a general statement and let the witnesses have the time.

Senator KNOWLAND. I might say that, under the rules under which the committee is operating, any of the witnesses may have their complete statements printed in the record even though they are not able to finish any extemporaneous remarks they may have.

Mr. GRIFFITH. Thank you, Mr. Chairman.

My name is C. A. Griffith, I am chairman of the California State Water Resources Board, and I am accompanied here by Mr. Sam R. Leedon, administrative assistant of the State water-resources board, and a number of witnesses whom I would like to call on later.

FLOOD-CONTROL PROJECT SCREENING

The board, as you know, Mr. Chairman, screens the flood-control projects very carefully and prepares the program that we would like

to present for your consideration. We have broken the projects down into construction funds and planning funds, and the program we would like to suggest today is as follows:

In the Los Angeles Engineering District for the drainage area of Los Angeles we have $21,570,000, and that is arrived at in this way: We feel that it is absolutely necessary for that program to be completed in 10 years. So, therefore, we are putting this amount in knowing full well that it is well above the amount that appears in the President's budget.

Next we have the Whittier Narrows Dam, $7,500,000, and the San Antonio Dam, $3,500,000.

ADVANCE PLANNING FUNDS

Now, for advanced-planning funds in the Los Angeles engineering district we have in Orange County the Carbon Canyon Dam, $100,000; in Riverside County, Riverside levees, $100,000; Bautista and San Jacinto levees, $100,000; in San Bernardino County, Warm, East Twin, Devil, and Lytle Creeks, $100,000; in Ventura County, the Santa Clara River and Santa Paula Creek, $114,000; and Stewart Canyon Dam, $26,000.

Now, in the Sacramento engineering district, we have the Cherry Valley Dam, $2,049,000, and I would like to say, Mr. Chairman, that the amount is contingent upon an increase in the authorization for the project. The hearing was held yesterday morning or the day before on the authorization bill. Then we have $15,000,000 for Folsom Dam. Our figure was arrived at before certain contingencies arose, which have caused construction delay. The budget figure is $9,800,000. For that reason there were carryovers from last year's construction money.

Next we have the Merced Stream group, $540,000; Pine Flat Dam, $3,150,000, which was the item appearing in the budget and completes the project; Sacramento River, old project, $5 million; Sacramento River, major and minor tributaries, $1,868,000; San Joaquin levees, $800,000.

In the Sacramento district we also are making the request for six items for planning, Black Butte Dam, $100,000; New Hogan Dam, $200,000; New Melones Dam, $100,000; Success Reservoir, $100,000; and Terminus Reservoir, $100,000.

In the San Francisco engineering district we only have one project in which we are asking for advance planning, and that is the Russian River project, $185,000.

EXAMINATIONS AND SURVEYS OF SOUTH PACIFIC DIVISION

Now, in addition to that, Senator, we feel that the Congress should appropriate money for preliminary examinations and surveys for the South Pacific area or division, and we are asking $500,000 for that purpose. That makes the program that we feel should have your consideration.

Now, Mr. Chairman, I would like to have my formal statement filed for the record, if I may?

Senator KNOWLAND. The entire statement will go into the record at this point.

Mr. GRIFFITH. Thank you, sir.
(The statement referred to follows:)

STATEMENT OF C. A. GRIFFITH, CHAIRMAN, STATE WATER-RESOURCES BOARD

Chairman Knowland and members of the committee, I am C. A. Griffith, of Azusa, chairman of the State Water Resources Board of California. Although our group has been appearing before this committee at each regular session of Congress for the past 7 years, I believe that due to the reorganization of the committee I should give you a little background regarding the board and the California Flood Control Conference which is represented here today.

The State water-resources board, of which I have the honor to be chairman, is the official agency of the State of California, created by the legislature and appointed by the Governor, for the purpose of implementing our State policy with regard to water-conservation and flood-control matters. Our board speaks for the Governor of California in its recommendations on flood-control projects.

When the Flood Control Act of 1944 was adopted by the Congress, the Legislature of California enacted a law under which the State pledged itself to pay for the cost of rights-of-way and utility replacements required by the Congress on authorized Federal flood-control projects. To date the State has appropriated $25 million for this purpose, and will continue to appropriate funds for this joint Federal-State venture.

On recommendation of the Board the legislature allocates these funds to our Board for reallocation to local agencies. For that reason, and because large amounts of State funds are required on many of the Federal projects, you may be sure they are carefully investigated by the Board before we make any recommendations for Federal appropriations, which will in turn involve State expenditures.

I also have the honor to appear here today as spokesman for the California Flood Control Conference, the members of which will present data in support of individual projects. There are many unique things about California, of which you have undoubtedly heard too much. However, I do think our method of screening and developing recommendations regarding appropriations for the numerous Federal flood-control projects in our State is unusual.

In the first place, the board's staff keeps a running account of the status of all projects very much the same, but in less detail than that of the Corps of Engineers. This starts even before authorization and runs through the various stages of planning and construction as the project progresses from step to step.

Once a project is authorized under Federal law, it requires approval of the plan of operation, a report on its financial feasibility, and a recommendation by the board before the legislature will adopt it for State participation.

The local agencies who are required to hold the State and Federal Governments free from damages and to operate and maintain the works at their own expense have formed an organization, which I have stated is called the California Flood Control Conference. The members of this conference represent the local agencies—flood-control districts, counties, and cities directly interested in the various projects. They are the people on the ground whom each project is designed to safeguard from flood hazards. Naturally they are completely conversant with the status of the project. Usually it was through their own efforts it was initiated and they are the ones who wish to see it constructed in the shortest possible time. They know their own needs and are not reticent about stating them.

This conference holds a meeting in the fall of each year and draws up a program of appropriation requests which it believes necessary to carry forward the work on each project. Our board then sets a special meeting and holds a hearing very similar to the one this committee is holding today. Representatives for the various projects present their needs and a justification of the expenditures they are requesting. Opposition to the project, if any, is heard.

The board then screens these requests, and by screening I don't mean simply rubber-stamping them. We, through consultation with the engineers of the district and division offices of the Corps of Engineers, try to establish the amount of funds required to carry on each project at an economic and justifiable rate. For those projects in the planning stage we try to determine availability of personnel, status of planning, and whether the money requested can be efficiently used.

I can tell you frankly that, for projects in the planning stage, this year we cut many requests ranging from half a million to a million and a half down, to $100,000

or $200,000 and less. The board then adopted its program for presentation in Washington; and every member of the conference, with possibly one exception, agreed to that program and is here in full support of it.

I am not going to go into the details of each project as other witnesses are here for that purpose. I will only say that the State water-resources board reduced the requested program by more than $10 million before coming to this committee with it.

This procedure, we believe is in conformity with the objectives of this committee and the new administration—which is to reduce Federal expenditures wherever there is waste. We are in agreement with that policy and will support it. With regard to flood control in general, we feel the expenditures made by the Government are more than repaid in preventing costly and damaging floods, which result in property, business and tax losses—not to mention the human suffering that goes with them. We feel that those projects under construction should be completed. Those in the planning stage should be brought to the point where they can be built when funds for construction of new projects are made available.

If Congress should decide tomorrow that flood control is no longer a Federal obligation—we will go along with that. After all it is the tax dollar we send to Washington you are spending. If it is left at home with us we are ready, willing, and able to shoulder the responsibility of building our own flood-control works. We only request that as long as flood control is considered a Federal obligation our projects receive the proportionate share of funds allocated for this purpose due them and are treated on a parity with other similar projects throughout the Nation.

Now a little about our flood-control problems in California. In land area our State is the second largest in the Union. Of its 158,295 square miles, two-thirds is mountainous and foothill lands, and the other third, valley and mesa lands. Our terrain contains the greatest extremes to be found in the United States. It ranges from the Nation's highest point at the peak of Mount Whitney, 14,496 feet above sea level, to its lowest point at Badwater in Death Valley, 280 feet below sea level. We have the second longest coastline in the Nation. On the eastern seaboard it would extend from Cape Cod to Charleston, S. C. On the Gulf coast it would reach from the Mexican border to Pensacola, Fla., and in the Mississippi Basin our State would extend from Chicago to New Orleans.

Our climate ranges from subzero temperatures to the extreme of desert heat; the annual rainfall from a maximum of 134.92 inches in the North coastal area to a mean of 1.7 inches in the desert regions. Snowfall, as actually measured by the snow survey crews on one of our State courses, has reached depths of over 300 inches with a water content of 150.7 inches.

Due to our large area and extremes in terrain and weather conditions, we are faced with every type of flood problem know to man. These vary from floods caused solely by high tides and winds to those caused by snowmelt alone. Wind-swept-storms raging in off the Pacific strike the California coast with unabated fury. Our precipitous mountain ranges catch the brunt of these storms, swelling the streams of flood stage as they course toward the valley lands. There have been destructive floods in the valley and coastal plains sections of the State caused by storms striking the mountains at higher elevations, with only moderate precipitation in the areas flooded.

The Federal flood-control program in California has been of great assistance to us in meeting these conditions. In the Sacramento Valley, the Sacramento River project, time and again has proved its effectiveness in the control of floods. Those works constructed in southern California, particularly in Los Angeles County, have been of great benefit. Their worth is so evident we are only sorry the program is not 10 years farther advanced than it now is.

The authorized program is a large one, which it is presently estimated will cost some $773 million to complete. For this program the Congress has already appropriated about $285 million leaving approximately $488 million of authorized construction to be completed. Providing construction costs remain constant, the program could be completed with an expenditure of about $50 million annually in the next 10 years.

Were conditions to remain static in California for the next 10 years, I am sure everyone would be happy with that sort of a program. However, if our experience during the next 10 years is anything like that of the past 10, we will still be about as far from our goal of flood protection as we now are. Our rapid growth in population, the construction of homes and industries on what are known flood planes, the encroachment of agriculture on waterways and fringe lands, all are creating new problems as fast or faster than we can solve old ones.

Our increase in population between 1940 and 1950 was more than 3,600,000 people. Gov. Earl Warren in addressing the legislature in January of this year pointed out that in the last 2 years we have grown in population by 720,000—the equivalent of a new city of 7,000 a week. In 2 years we have built 315,000 dwelling units, which is more than we had in our second largest city, San Francisco, in 1950. In the 2-year period our highways had to accommodate 556,000 more motor vehicles. Every indication is that we must continue to meet this rate of growth. By 1960 it is estimated we will have 14 million residents and 18,400,000 by 1970.

This type of growth is without precedent in the history of mankind. It poses problems of every kind. Water supplies, sanitary facilities, light and power, schools, highways, hospitals, and prisons must be built for these new cities of 7,000 people that spring to life every week, in addition to protecting them from floodwaters.

It is a costly process. Our State budget of $1,320,000,000 for the next fiscal year is larger than that of any other State in the Union. It is larger than all Federal expenditures were for any single year prior to 1918. We are paying our own way now, as we have in the past and expect to do in the future.

In seeking Federal funds for flood-control projects we do not come to you empty handed or without a record of having carried our full share of the burden of such projects. Let me cite just two examples of what we have spent and are spending in local funds on flood-control works.

On the Sacramento River project which was started by local interests long before the Federal Government stepped in, local interests and the State have expended an estimated $80 million as against an expenditure of $43,800,000 by the Government. It was estimated last year it would cost about $19,500,000 of Federal money and $15 million of local money to complete the project.

In Los Angeles County alone, the countywide flood-control district has expended $104,274,000 of non-Federal funds for flood-control works. The local obligation on the presently authorized Federal project for the Los Angeles River drainage area is estimated at $49 million. In addition, the county has just voted a bond issue of $179 million for the construction of storm drains and other works related to flood control.

The program of proposed appropriations recommended by the State water resources board was adopted before the President's budget was sent to Congress. On examination of the budget figures we found that for all projects under construction, with the exception of the project for the Los Angeles River drainage area, our recommendations were almost identical with those in the budget. We made certain recommendations for planning funds, which in the budget are covered by a lump sum and consequently are not subject to comparison. It did show, however, that our program was very close to that recommended by the Bureau of the Budget.

Since that time, it is my understanding, the Corps of Engineers has submitted revised estimates of funds required for the next fiscal year. I do not know on what criteria these new estimates are based. The tempo at which construction is to be carried on, of course, is a matter for decision by the Congress.

The program adopted by the board is divided into sections-construction funds, planning funds and preliminary examinations and survey funds as follows:

Los Angeles engineering district:	
Construction funds:	
Los Angeles River drainage area	$21,570,000
Whittier Narrows Dam	7,500,000
San Antonio Dam	3,500,000
Total	32,570,000
Advance planning funds:	
Carbon Canyon Dam	100,000
Riverside levees	100,000
Bautista and San Jacinto levees	100,000
Warm, East Twin, Devil, and Lytle Creeks	100,000
Santa Clara River and Santa Paula Creek	114,000
Stewart Canyon Dam	26,000
Total	540,000
Total, Los Angeles engineering district	33,110,000

Sacramento engineering district:	
Construction funds:	
Cherry Valley Dam	$2,049,000
Folsom Dam	15,000,000
Merced Stream group	540,000
Pine Flat Dam	3,150,000
Sacramento River, old project	5,000,000
Sacramento River, major and minor tributaries	1,868,000
San Joaquin levees	800,000
Total	28,407,000
Advance planning funds:	
Black Butte Dam	100,000
New Hogan Dam	200,000
New Melones Dam	100,000
Success Reservoir	100,000
Terminus Reservoir	100,000
Total	600,000
Total, Sacramento engineering district	29,007,000
San Francisco engineering district:	
Advance planning funds: Russian River project	185,000
Total, San Francisco engineering district	185,000
South Pacific division: Preliminary examinations and surveys	500,000
Total	500,000
Grand total	62,802,000

And now before introducing the members of the California Flood Control Conference who will speak on the individual projects, I want to thank this committee for the careful consideration it has always given our California program. It is a statewide program and I hope that in presenting it as such it loses none of its effectiveness. I thank you.

Mr. GRIFFITH. Now it is my pleasure to introduce certain witnesses, and the first one will be Mr. H. E. Hedger, chief engineer of the Los Angeles County Flood-Control District of California.

LOS ANGELES FLOOD-CONTROL DISTRICT, CALIFORNIA

STATEMENT OF H. E. HEDGER, CHIEF ENGINEER

BUDGET ESTIMATE

Senator KNOWLAND. Colonel, it is good to have you before the committee again.

Mr. HEDGER. Thank you.

My name is H. E. Hedger, and I am chief engineer of the Los Angeles County Flood-Control District.

I would like to speak of the situation as it affects the county of Los Angeles in California. Mr. Griffith has given you the figures that the State has agreed represent the needs for appropriations in our county as well as the rest of the State, and the board of supervisors of our district concurs in those views.

I might point out that in preparing those figures the overall estimate of cost of each of the units that were described was used, therefore, they may differ from your budget recommendations which I believe

are limited to expenditures that can be made during the next year, but the work program is essentially the same as that included in the Corps of Engineers budget estimates on the major channels. It is only on a few of the tributary channels that the budget does not carry out the work program that we feel is needed this year.

WHITTIER NARROWS PROJECT

There are three projects in Los Angeles County that are of vital interest to our people. One is the Whittier Narrows project, which has been under construction for several years, and which we feel probably affects the lives and well-being of more people than any single project in the county. The vast residential developments in the vicinity of Lakewood and Long Beach depend upon the completion of that project for their security. It should be completed at the earliest possible date, and we feel that the budget program represents minimum progress along that line.

The job should be finished in not more than 2 years, and I believe that the budget recommendation will make that possible.

SAN ANTONIO DAM

The San Antonio Dam is in like situation. It is under construction, and the budget recommendations are such that we can expect that that may be completed in another 2 years.

Senator KNOWLAND. I think you are familiar with the fact that both of those items went in through this subcommittee in the Senate bill to get the work started?

Mr. HEDGER. Senator, I am aware of that and most appreciative, and we made certain that the people of the Los Angeles area have understood that. The board of supervisors is also cognizant of that situation. Frankly, I think only the efforts of your subcommittee and yourself have given us the progress that we have had on those projects.

LOS ANGELES COUNTY DRAINAGE AREA PROJECT

The third project of concern to the county of Los Angeles is known as the Los Angeles County drainage area project. It includes the vast flood-control system that is so essential there. It is needed to overcome probably the greatest overall hazard that exists in the country today. There are approximately 1 million people that live in areas subject to flood hazard that will be protected when that project is completed. It involves, incidentally, billions of dollars in assessed valuation.

APPROPRIATION HISTORY

I would like to review briefly the history of appropriations for this project. It was authorized in the first omnibus flood-control project in 1936. It has been under construction for 17 years. In 1946 after some delays due to the war it had reached a stage of about 26 percent completion. By today we have reached an estimated 34 percent of of completion. In 8 years, then, we have advanced about 8 percent toward total completion of that project, one of the largest and most important in the country, an average of about 1 percent a year. We do not think that that is a realistic approach to the problem out there.

The country is growing faster than the flood-control work that is being done out there.

Senator KNOWLAND. I will say that the subcommittee had quite a detailed discussion with the engineers some weeks ago when they were before the committee and pointed out that unless we could get a more realistic approach in the Budget Bureau and in the engineers as well as in the Congress actually it might take another 40 years before this project is completed.

Mr. HEDGER. That is our fear, sir.

Senator KNOWLAND. Consequently with the tremendous population and productivity and importance to the defense effort in the case of war or preparation for defense that this program would have to be accelerated and as a matter of equity should be.

Mr. HEDGER. It is fine to know that the committee has that point of view because that is the way it is felt locally, sir.

The present rate of appropriation recommended in the budget is much superior to the rate in the part several years, but even so would require better than a generation to complete.

Senator KNOWLAND. We can be prayerfully thankful for the slight increase in the recognition, but as we pointed out the other day, there are some of these places where the increased cost on the price index has actually moved ahead faster than the funds which means in effect the project may have moved backward a bit. So I am sure that the engineers next year will have that in mind in reviewing the overall situation throughout the Nation, at least I hopefully mention that in the presence of General Chorpening.

ANTICIPATED COMPLETION DATE

Mr. HEDGER. That certainly represents a realistic approach, and that is all that we can ask for. We believe that the project should be completed in about 10 years. That would be realism. That is the basis on which the project report was adopted by Congress. It recommended appropriations on the order of $20 million a year, and that would finish the project in just about a 10-year period, and we certainly hope that the Corps of Engineers and the Bureau of the Budget will agree with the views that you have expressed and that it may go forward in that way.

There is one other factor that your subcommittee may not be aware of that I would like to mention. In addition to the flood-control system that the Federal Government is going to help construct, there is a vast need for a connecting system to bring floodwater to the flood-control system and the county of Los Angeles or the flood control district, rather, has recognized that as a local obligation.

SUPPLEMENTAL FLOOD CONTROL SYSTEM

The electorate of our district last November voted an appropriation of $179 million to construct the supplemental system that is necessary to tie in with the system that Congress must make appropriations for. The district has already expended about $124 million as its share of the flood-control work in the county. So that it is far ahead of the expenditures made or contemplated by the Federal Government to date, but we will, in spite of those efforts to help ourselves, need Federal help.

One thing that will be vital to us in the next few years is that a number of the projects that the people voted this large sum of money for last November depend on the improvement of some of the flood channels in the Federal system to provide an outlet for their floodwaters, such channels as Eaton Wash, Arcadia Wash, Sawtelle Creek, Burbank Western Channel, and Sentinel Creek. All of those must be completed in the next few years in order not to hold up the program that our electorate has provided funds for.

So we ask for the cooperation of both Houses of Congress, the Corps of Engineers, and of the Bureau of the Budget in working with us to solve the bottleneck that exists in that respect, too. We believe that we come before the Congress with a record of maximum effort to solve our own problems as far as it is physically possible. We appreciate most heartily the help that we have had from your committee and from the other branches of the Federal Government, and we do thank you for this opportunity to present our case.

Senator KNOWLAND. Thank you. Your statement will be made a part of the record.

Mr. HEDGER. Thank you, sir.

(The statement referred to follows:)

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Statement of H. E. Hedger, chief engineer, Los Angeles County Flood Control District, California

Mr. Chairman and gentlemen: The Los Angeles County Flood Control District a political subdivision of the State of California, is the local agency responsible to the Federal Government for the local cooperation required by Congress for flood control improvements authorized within Los Angeles County and I, as chief engineer of the district, have been authorized by its governing board of supervisors to present to you the need for Federal appropriations with which urgent flood control improvements can be undertaken during fiscal year 1954.

It is with a sense of both deep appreciation and responsibility that the needs for flood control work in Los Angeles County are presented—appreciation because it is only with the help of the Federal Government that such work may materialize in time to protect our people, and responsibility because the appropriations we ask you to authorize will necessitate similar appropriations by our district, in some instances about equal in amount. Hence, we have weighed the program of flood control works to be requested for Los Angeles County most carefully and have made certain that the local obligations connected therewith are within our financial potentiality before submitting them to you.

Why does Los Angeles County need so much flood control work? As you have probably heard, Los Angeles is different in many ways than other parts of the country and so it is with floods. In a rather unorthodox fashion the elements seem to store up their energies insofar as rain is concerned and loose them all at once on special occasions. These we call cloudbursts. On occasion they produce rainfall in our metropolitan area at a rate as great as 11 inches in 11 hours and in our more mountainous watersheds at an extreme record rate of 26 inches in 24 hours. Then, too, the topography of Los Angeles County is unusual in that the metropolitan area occupies a relatively flat plain averaging less than 25 miles in width, backed by a range of mountains averaging 20 miles in width and ranging from 6,000 to 10,000 feet in elevation. When heavy rainfall occurs, runoff develops from the mountain area quickly and in an hour or two deluges of floodwaters and debris issue forth onto the coastal plains. Even so, until recent times residents of Los Angeles County were able to build on relatively flood-free ground. In the last few years, with increasing saturation of the area as to population, which now exceeds 4,500,000, great masses of people have been impelled to live in areas which have been flooded in the past and will continue to be subject to flood hazard until Congress has authorized the last appropriation needed to complete the flood control system it first authorized in 1936, again in 1941, and again in 1944, which is named the Los Angeles County drainage area project.

From the standpoint of potential hazard to lives, property, industry, and many defense activities, the flood hazard in Los Angeles County remains one of the greatest in the country.

The chairman of the State water resources board has presented the statewide program of flood control needs which include the following construction projects in Los Angeles County:

Los Angeles County drainage area project	$21, 570, 000
Whittier Narrows flood control basin	7, 500, 000
Santa Ana River Basin	3, 500, 000
Total	32, 570, 000

The Los Angeles County drainage project, which was first authorized in 1936, and is about 35 percent complete, consists of an interrelated system of flood channels and regulating reservoirs currently estimated to have a Federal cost of $326,088,000, of which Congress has to date appropriated $113,656,000, leaving $212,432,000 yet to be appropriated to meet the estimated cost of completing the project. The units of this project on which work should be continued during 1954 are as follows:

Los Angeles County drainage-area project

Los Angeles River:	
Ocean to 7th St	$1, 500, 000
7th St. to Anaheim Blvd., Long Beach	3, 100, 000
Pacific Electric Ry. (Santa Ana Branch) to Compton Blvd	2, 600, 000
Stewart and Gray Rd to Pacific Electric (Santa Ana)	400, 000
Sepulveda Reservoir to Reseda Blvd	2, 800, 000
Rio Hondo:	
Southern Pacific R. R. to Santa Ana Freeway	2, 000, 000
Santa Ana Freeway to Washington Blvd	2, 468, 000
Pacoima Wash: Arleta Ave. to Lopez flood-control basin	1, 100, 000
Lopez flood-control basin	1, 002, 000
Eaton Wash: Rio Hondo to Ellis Lane	600, 000
Sawtelle-Westwood Channel: Charnock St. to National Blvd	2, 100, 000
Burbank-Western Channel: Burbank Blvd to San Fernando Rd	900, 000
Arcadia Wash: Rio Hondo to Live Oak Ave	1, 000, 000
Total	21, 570, 000

The estimates include the total cost of each improvement, regardless as to the fiscal years in which the appropriations or expenditures may be made.

The revised budget recommendations submitted by the Corps of Engineers and the Bureau of the Budget, according to published accounts, recommend the sum of $6,975,000 of new funds and $1 million of surplus funds, a total of $7,975,000 for continuing work on this project. This amount would, we believe, permit work to go forward on all of the units included in the above list except the last four, since the Corps' estimates are limited to expenditures contemplated in fiscal year 1954. We were aware and appreciative of the new administration's desire to reduce 1954 budget appropriations by elimination of nonessential projects but did not believe it conceivable that any of the above projects could be so classified, and this was borne out by the budget review, which did not appreciably change the work program originally submitted. The need for this work is directly attributable to the protection of lives and property from floods and is not concerned with other purposes, such as power, irrigation, navigation, etc. The budget recommendations now before you are indeed much too small to serve the real requirements of our county today. The Corps of Engineers, the Bureau of the Budget, the California Senators and Representatives know that in addition to the Corps' recommended work program for fiscal year 1954 there is a most urgent need for flood protection on Arcadia Wash, Eaton Wash, Sawtelle-Westwood Channel, and Burbank-Western Channel, which have been included in the recommendations of the State water-resources board and of this district, as well as other units, such as the Centinela Creek, that also demand consideration.

The budget recommendations before you also include provisions for the work we have listed as necessary on the San Antonio flood-control project and Whittier Narrows flood-control basin, although not in the same amounts. These projects, too, are vital to the protection of our citizens. Since initiation of work on the Whittier Narrows project in 1950, new communities with a population totaling

370,000 have sprung up in the area below this dam thus raising to 1,140,000 the total number of people dependent upon this project for flood protection. The safety of these people necessitates the earliest possible completion of this project.

We have contended since 1940 that the funds appropriated for the Los Angeles County drainage-area project were insufficient to represent a realistic effort to solve the flood problems arising from the tremendous acceleration of growth in Los Angeles County. We believe that the time has come when flood-control appropriations should be recommended to and approved by Congress in such amounts as to enable this project to be consummated within a reasonable period of years and we would define "reasonable" as not to exceed 10 years. At the rate of 1953 appropriations, it would take 40 years to complete this project and, even at the rate proposed in the 1954 budget, 27 years would be required for its completion.

To the uninformed it may seem that Los Angeles County is seeking too much help from the Federal Government. The falseness of this assumption is evident when the full extent of the flood-control requirements in our country are considered. The total estimated Federal cost of the three congressionally authorized flood-control projects affecting our county is as follows:

Los Angeles County drainage-area project	$326,088,000
Whittier Narrows flood-control basin	36,320,000
San Antonio project	8,351,000

Los Angeles County will expend approximately $49,000,000 in furnishing rights-of-way and revising highways and highway bridges for these authorized Federal programs.

In addition, there are other flood-control projects in Los Angeles County which are not federally authorized for which our district must be responsible, totaling $150,000,000 in estimated cost.

There are also supplemental flood-drainage projects in municipalities and unincorporated territory that do not come within the purview of Federal flood-control financing which are estimated to cost $355,000,000. The total program, then, of major and supplemental flood-control improvements in Los Angeles County approximates $924,759,000, of which the Federal portion amounts to 40 percent.

Toward this total program our district, as the responsible local agency, has already appropriated $124,823,000 and each year devotes its entire revenues averaging $11,500,000 in meeting the local obligations required on Federal projects and in meeting its responsibilities on non-Federal projects. In addition, at the last general election on November 4, 1952, the electorate of this district, by nearly a 4-to-1 majority, approved a bond issue in the amount of $179,000,000 to apply toward meeting the supplemental flood-control program mentioned above. Construction of adequate flood channels for Eaton Wash, Sawtelle-Westwood Channel, Burbank-Western Channel, Arcadia Wash, and Centinela Creek is essential to provide outlets for many of the elements of this supplemental program and therefore necessitates Federal appropriations for these units in fiscal year 1954 or 1955.

In spite of the tremendous local efforts to meet flood-control needs, assistance of the Congress is necessary to cope with the major flood problems faced by our people. With such a splendid record of self-help, which we doubt will be found in many areas, we present our most urgent needs with confidence that you will agree as to their essentiality and will provide the Federal funds necessary to carry the program to early completion in an orderly and businesslike manner.

Thank you.

Senator KNOWLAND. Who is the next witness?

Mr. GRIFFITH. Mr. Willis H. Warner, chairman, Orange County Board of Supervisors and Orange County Flood Control District.

BOARD OF SUPERVISORS—FLOOD CONTROL DISTRICT, ORANGE COUNTY, CALIF.

STATEMENT OF WILLIS H, WARNER, CHAIRMAN

COMPLETION OF PLANNING AND CONSTRUCTION

Mr. WARNER. Senator Knowland and members of the committee, I am Willis H. Warner, chairman of the Orange County Board of Supervisors and the Orange County Flood Control District.

Mr. Chairman, we are particularly requesting favorable consideration of this appropriation so that local interests will be able to complete their planning and construction of works to be constructed by local interests to conduct the water from their project from the city of Anaheim, a distance of some 12 miles. There has been exceedingly rapid development in that area, and if the project goes uncompleted it leaves valuable development in the bath of destruction. We understand that from previous funds made available the district engineer's office has the plans approximately 60 percent complete.

Early completion of this planning would greatly assist local interests in developing their plans and getting the project under way.

Senator KNOWLAND. General Chorpening, what would be required to complete this?

General CHORPENING. We may have that here, Senator Knowland.

Senator KNOWLAND. If not, you can furnish that information for the committee.

General CHORPENING. Yes.

(The information referred to follows:)

An additional $50,000 will be required for planning.

Mr. WARNER. It was an estimate that this $100,000 would take care of it; it may not take that much. We would ask for sufficient funds to complete the planning of the project.

Senator KNOWLAND. Thank you very much. Your statement will be made a part of the record.

Mr. WARNER. Thank you, sir.

(The statement referred to follows:)

BOARD OF SUPERVISORS,
COUNTY OF ORANGE,
Santa Ana, Calif., May 6, 1953.

SENATE CIVIL FUNCTIONS SUBCOMMITTEE,
United States Congress, Washington, D. C.

GENTLEMEN: The attached statement concerning the Carbon Canyon flood-control project in Orange County, Calif., is submitted to your honorable subcommittee for the purpose of supplementing the request of the State water resources board for the appropriation of funds for flood-control projects in California.

Respectfully submitted.

WILLIS H. WARNER,
Chairman, Orange County Board of Supervisors and Orange County Flood Control District.

PROPOSED CARBON CANYON DAM IN ORANGE COUNTY, CALIF.

Act of Congress, Public Law 738, 74th Congress, approved June 22, 1936, as amended by Public Law 208, 75th Congress, approved July 19, 1937, authorized the Secretary of War, under the supervision of the Chief of Engineers, construction of "reservoirs and related flood-control works for protection of metropolitan area in Orange County, Calif."

On October 6, 1936, the Board of Supervisors of Orange County Flood Control District, by appropriate resolution, pledged itself and the Orange County Flood Control District to comply with the provisions set forth in said act.

A major flood in 1938 resulted in a report of the district engineer, Los Angeles district, United States engineer office, dated July 1939, submitted through channels to the Chief of Engineers, recommending the construction of eight flood-control dams and appurtenant structures on the main streams within Orange County. The flood-control basins are located on Santa Ana River; Brea, Carbon, San Juan, Trabuco, Santiago, Fullerton, and Aliso Creeks.

Under the authority granted by the above act and a Congressional appropriation, construction of the dams on Santa Ana River, Brea and Fullerton Creeks was completed by 1941.

On July 3, 1941, the board of supervisors, at the request of the United States engineer office, adopted a resolution designating the order of priority desired for future construction of flood control basins in Orange County as follows:

1. Carbon Canyon
2. San Juan Creek
3. Santiago Creek
4. Arroyo Trabuco
5. Aliso Creek

By chapter 1514, statutes of 1945, the California State Legislature authorized the inclusion of these projects in said act.

On January 7, 1947, the board of supervisors, by resolution, reaffirmed the above order of priority desired for construction of flood-control basins in Orange County.

Carbon Canyon, the No. 1 project, is briefly described as follows:

LOCATION

On Carbon Creek approximately one-half mile south of Olinda in Orange County, Calif.

DESCRIPTION OF IMPROVEMENT

An earth dam to form a retarding basin to control the storm and floodwaters of Carbon Canyon Creek and a lined channel for the released flow from the basin. The estimated cost of this project is $5,725,000.

JUSTIFICATION FOR PROJECT

The purpose of this project is to afford protection to approximately 17 square miles of farm and citrus lands, the unincorporated communities of La Jolla and Los Alamitos, and the industrial district plus a large residential section of the city of Anaheim. All of these areas have suffered major damage from the uncontrolled flow of this stream, the most recent flood occurring in January 1952.

The population of the area subject to inundation is approximately 8,000, and the assessed valuation, exclusive of railroads, exceeds $15 million.

In past years the uncontrolled flow of this stream has disrupted traffic on 9 State highways and 30 county roads in addition to many city streets in Anaheim. This interruption of traffic is particularly serious in this area where all industrial workers use highway transportation to reach their place of employment.

The Santa Fe, Union Pacific, Southern Pacific and Pacific Electric railroads have seven rail lines in this area, operations of which are endangered by these floodwaters. Lines from Los Angeles to the East, from Los Angeles to San Diego, and the line serving the United States Navy Ammunition and Net Depot are among those affected.

The Los Alamitos Naval Reserve Air Station lies within the area subject to inundation by the waters of Carbon Canyon Creek and risks complete immobilization during severe storms.

Within the limitations imposed on funds and personnel by wartime and postwar conditions, the district engineer of the Los Angeles district, Corps of Engineers, has made studies and has partially completed plans for the construction of Carbon Canyon Dam and Channel. It is respectfully requested that the Congress make available to the district engineer funds in the amount of $100,000 for the purpose of completing the construction plans for this vitally needed flood-control project.

Senator KNOWLAND. Who is our next witness?

Mr. GRIFFITH. Mr. A. C. Keith, county surveyor of Riverside County.

RIVERSIDE COUNTY, CALIF.

STATEMENT OF A. C. KEITH, COUNTY SURVEYOR

AMOUNT REQUESTED

Mr. KEITH. Senator Knowland, my name is A. C. Keith, and I am engineer for the county of Riverside and of its flood-control district. The board of supervisors of the county and of the district

have authorized me to appear here and request an appropriation of $100,000 for the Santa Ana levee project in zone 7 and $100,000 for the Santa Jacinto and Bautista Creek levees project in zone 9.

The study of these projects was authorized in 1937, but due to the war the survey was not completed until 1946. They were authorized as projects by the first session of the 81st Congress, but as of this date no appropriations have been made. You are familiar, Senator, with the California rivers, that they are very steep and the San Jacinto and the Santa Ana are mild normally but are very swift and destructive.

PURPOSE OF PROPOSED LEVEES

These levees proposed would protect the northern part of the city of Riverside and the cities of Hemet, San Jacinto, and the intermediate country in the Hemet area.

The surveys indicated that these projects had a high benefit-cost ratio. The growth has been extremely rapid, increasing about 25 percent in these areas in the last 2 years. So that we feel they are much more justified at this time, and our people believe that appropriations should be made for the first step. We would like you to consider this flood menace, the high rate of growth, and the high benefits to be received.

TOTAL COST

Also that these are small projects, categorically speaking, the total cost of the San Jacinto levees being about $3,279,000 and the Santa Ana $3,845,000. Of that the Santa Ana, the local participation would be $1,329,000. We request, Senator, that these initial appropriations be made to start these projects

Senator KNOWLAND. Thank you very much. Your statement will be made a part of the record.

Mr. KEITH. Thank you, gentlemen.

(The statement referred to follows:)

STATEMENT OF A. C. KEITH ON BEHALF OF THE RIVERSIDE LEVEE AND SANTA ANA RIVER-BAUTISTA CREEK PROJECTS ON THE SANTA ANA RIVER, CALIF.

Mr. Chairman and gentlemen of the committee, my name is A. C. Keith, engineer for the county of Riverside, Calif., and the Riverside County Flood Control and Water Conservation District. The county board of supervisors has authorized me to come here to solicit your support for an appropriation of $100,000 for the authorized Riverside levee project and $100,000 for the authorized San Jacinto-Bautista Creek project in our county.

These projects were authorized by the 1st session of the 81st Congress in H. R. 5472, which was signed by the President May 17, 1950. As of this date, no appropriations have been made to initiate construction.

The two Riverside County projects are described briefly as follows:

1. Riverside levees, zone 7

This project consists of two levees on the Santa Ana River near the city of Riverside with a total length of 24,250 lineal feet. The two levees will protect the northwestern portion of the city of Riverside and the unincorporated community of West Riverside.

Estimated cost of project

Federal	$2,516,000
Local	1,329,000
Total cost	3,845,000

2. San Jacinto River and Bautista Creek levees, zone 9

This project consists of three levees on the subject streams with a total length of 38,430 lineal feet. These levees will protect the cities of Hemet, San Jacinto, and the Valle Vista communities from flood damage.

Estimated cost of project

Federal	$3, 162, 000
Local	117, 000
Total cost	3, 279, 000

Floods in Riverside County in the Santa Ana River Valley have in the historic past taken a number of human lives and have caused people to suffer great damage. Congress in 1937 authorized a study of these flood problems along the Santa Ana River. Unfortunately, considerable delay was had in completing the investigation and report due to World War II, but the report was finally completed in 1946 and the projects authorized in 1950. Of the four projects included along the Santa Ana River, the Riverside levee project had at the time of the survey the highest benefit-cost ratio, being 1.55:1.

For some time since the war, there has been an administrative limitation on the expenditure of Federal funds for the starting of new flood-control projects. However, in 1949, the appropriation bill included 17 new small projects because of the urgent demand for these new works. Our projects fall within this small project category.

The assessed value of Riverside County in 1937 when the project study was authorized was some $85 million and is presently $275 million. Over a 300-percent increase.

The population has increased 25 percent and the assessed value 15 percent in the last 2 years.

The projects had a high benefit-cost ratio in 1946 and with the rapid growth our people believe that it is essential to undertake the first step on these projects and that funds be made available for definite planning and design.

Gentlemen, we ask that, recognizing the potential flood menace that exists, the tremendous population that is expanding, the rather small projects concerned, and the high local financial participation, that on the basis of all of these conditions, you grant an initial appropriation of $100,000 for the Riverside levee project and $100,000 for the San Jacinto-Bautista Creek project.

Senator KNOWLAND. I might say without infringing too much on your time here that the clerk who just came in had requested that I go to the Interior Subcommittee, of which I also happen to be a member, because we had some California witnesses there. I told him I had a room full of California witnesses here and that I could not divide myself.

Whom do we have next?

Mr. GRIFFITH. Senator Knowland, Representative Phillips wanted to be connected with this project, and I think Mr. Adams is present.

STATEMENT OF DONALD ADAMS, ADMINISTRATIVE ASSISTANT TO REPRESENTATIVE JOHN PHILLIPS, 29th DISTRICT, CALIFORNIA

Mr. ADAMS. Congressman Phillips was not able to be here today because of his chairmanship on Independent Offices, and he asked me to convey to you and to the committee the fact that he fully supported the statements made by Mr. Keith.

Senator KNOWLAND. I know that Congressman Phillips has taken a very great interest in these problems and has been tied up with his own Subcommittee on Appropriations over there, otherwise he would be present.

Mr. ADAMS. Thank you, Mr. Chairman.

Mr. GRIFFITH. Next we have Mr. James F. Lyttle, chairman of the Sonoma County Board of Supervisors.

SONOMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, CALIFORNIA

STATEMENT OF JAMES F. LYTTLE, CHAIRMAN

RUSSIAN RIVER PROJECT

Mr. LYTTLE. Mr. Chairman, I am James F. Lyttle, chairman of the Sonoma County Flood Control and Water Conservation District.

Mr. Chairman, I would like to impress upon you and your committee the urgency of the Russian River project. As you know, the Russian River heads in southern Mendocino County and winds down the rich Russian River Valley of Sonoma County to the ocean, comprising some 1,600 square miles and embracing a population in excess of 100,000 people.

ANNUAL FLOOD DAMAGE

The urgency is borne out, I believe, in the estimate of over $700,000 annual loss from flood damage. This varies from a few hundred thousand in 1 year to in excess of 2 million in another year. We can say that though it is bad on individuals, our local constituents, when improvements are lost due to these floods, but I believe the big responsibility of people in public office is to protect our rich agricultural land.

A large part of this loss on heavy flood conditions is due to the washing away of some of the most fertile land in our county, land that we can never replace. We can replace buildings and other improvements, but once an acre of land is washed to the ocean, it is not replaceable. This urgency was brought to my attention just before I left Sonoma County when we had 2 petitions from 2 different areas, 1 at Cloverdale and 1 at Geyserville requesting aid for channel correction or protection in those areas. We had our engineer investigate these 2 sections, and he reported that if heavy waters come in the next year or two that several hundred acres in those 2 areas will be washed away and replaced by gravel bars.

PLANNING FUNDS REQUESTED

I think that is one of the most urgent needs, that this project be fulfilled at the earliest possible time. We wish to request that sufficient funds be supplied to the Army engineers so that planning can be brought up sufficiently so that in fiscal year 1955 we can ask for appropriations for construction.

Senator KNOWLAND. Thank you very much.

Mr. LYTTLE. Thank you, Senator.

Senator KNOWLAND. Your statement will be inserted in the record.

(The statement referred to follows:)

THE RUSSIAN RIVER PROJECT

Extracts from Federal, State, and District reports, May 1, 1953, Paul L. Nichols, chief engineer, Sonoma County Flood Control and Water Conservation District

SONOMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, SANTA ROSA, CALIF.

(Board of directors: James Lyttle, chairman, Joseph Cox, William Kennedy, Victor Anderson, Donald Richardson)

Introduction

The Russian River project was prepared by the Corps of Engineers, United States Army in 1950. The initial plan of development calls for a dam and reservoir in Coyote Valley, Mendocino County with a gross capacity of 122,000 acre-feet. It would be so constructed that it could be enlarged later to a gross capacity of 199,000 acre-feet.

At the same time, 64 miles of the Russian River channel would be improved. This improvement would consist of widening, straightening, and reinforcing the banks of the river.

In addition to flood control along the Russian River, the project would make available water for increased summer flow and water for domestic and industrial use. It would insure water for irrigation if needed during dry years. The yield from wells in the district is not good, as shown on plate 6, Well Data. The estimated demand for water is shown on the plate, Estimated Water Need and on plate 3, Industrial and Domestic Water Use.

The amount of water per year which would be made available is shown on the plate, Water From the Russian River Available for Storage and Distribution. This water is of good quality as shown by periodic sampling made by the State department of water resources.

It would not be necessary to go all the way to Mendocino County with an aqueduct to pick up the water for use in this district. The water could be retained by a low dam near Wohler Bridge upstream from Mirabel Park, pumped into a water filtration and purification plant, then conveyed to the using communities such as Santa Rosa Township, Analy Township, Petaluma Township, Sonoma Township, etc. This plan was reported upon in detail by the Whipple Engineering Co. in October 1950.

Following are extracts from the report of the Chief of Engineers to the 81st Congress, 2d session on the Russian River project and comments by the following agencies:

The Secretary of Agriculture, the State director of public works, and the State engineer, the director of the department of natural resources, State of California, and the Whipple Engineering Co. Copies of the full reports from which these extracts were taken are on file in the office of the Sonoma County Flood Control and Water Conservation District.

Recommendations of the Chief of Engineers, United States Army

The following is quoted from the report of the Chief of Engineers:

"Major floods occur in the late fall, winter, and early spring months, on the average about once in 5 years as a result of intense rainfall in the drainage area. They cause damage to agricultural lands and improvements, crops, residential and commercial properties, bank protective works, highways, streets, bridges, and railroads. Flood stages usually subside within 3 or 4 days. The most serious flood of recent record occurred in February 1940 and caused damages evaluated, on average 1947 price levels, at $2,935,000. Other notable floods occurred in March 1935, February 1937, December 1937, and December 1945, causing reported damages totaling $3,119,600 at 1945 price levels. Average annual damages from future floods in the basin are estimated at $720,000. The annual runoff in the basin normally would be adequate, if regulated, to supply all needs for domestic water supply, irrigation, and fresh water flow through the recreational areas, and provide considerable surplus for export to water deficient areas bordering the basin on the south. However, the seasonal distribution of rainfall results in low stream flow in the late summer and early fall, and depletions by domestic and irrigation uses increase the frequency of the undesirably low flows through the recreational areas.

"I have given careful consideration to the plan for the improvement of the Russian River Basin and to the recommendations of the Board of Engineers for Rivers and Harbors which are set forth in this report. I believe that this is a

meritorious project suitable for undertaking by the Federal Government in conjunction with local interests.

"In view of the foregoing I recommend that the ultimate plan of improvement consisting of (1) a multiple-purpose reservoir on the East Fork of the Russian River at Coyote Valley: (2) channel stabilization works along the Russian River and its tributaries; and (3) a multiple-purpose reservoir on Dry Creek; at a total estimated cost of $42,460,000 for construction and $48,700 annually for maintenance and operation, as outlined in the report of the district engineer, be adopted as a basis for the development, step by step, of the water resources of the Russian River Basin, Calif., for flood control and water supply, and that the initial stage of development consisting of Coyote Valley Reservoir with a gross capacity of 122,000 acre-feet and provisions for subsequent enlargement, and channel stabilization works on Russian River, be authorized for construction, generally in accordance with the plans of the district engineer and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable, at an estimated cost to the United States of $11,552,000 for construction and $18,900 annually for maintenance and operation of the reservoir.

"Provided that local interests furnish assurances satisfactory to the Secretary of the Army that they will: (*a*) furnish free of cost to the United States all lands, easements, and rights-of-way necessary for the construction of the channel stabilization works; (*b*) make all necessary road and bridge revisions and utility alterations and relocations required for the channel stabilization works; (*c*) adjust all claims concerning water rights arising from the construction and operation of the improvements; (*d*) hold and save the United States free from damages due to the construction works; (*e*) maintain the channel stabilization works, after completion, in accordance with regulations prescribed by the Secretary of the Army; (*f*) prevent any encroachment on the stream channel which would interfere with the proper functioning of the improvements or lessen their beneficial effects; and (*g*) enter into an agreement among themselves as to the method of operation of the reservoir for conservation, subject to flood control priority, and provided further that prior to initiating construction of the reservoir local interests contribute $5,598,000 in cash for the reservoir construction cost.

"In making this recommendation, I desire to point out that the initial stage of development of this project is primarily for flood control. However, the operation of the Coyote Valley Reservoir will improve existing irrigation water supplies by adding supplemental water and will be of value to existing irrigation developments in the basin. This improvement of water supply is obtained through use of the proposed flood control reservoir and is incidental to the flood control project. The initial stage of this proposed plan of improvement differs from the usual Federal irrigation project of the Bureau of Reclamation in that its irrigation value would result from storage and better regulation of an existing water supply. Construction of additional headworks, canals, and distribution systems would not be needed to make use of improved flows. Benefits would be spread over a long distance below the proposed reservoir and would accrue to a large number of local irrigators, rather than to a compact organized district.

"Local interests have recognized the conservation value of the proposed improvement, and it is my understanding that they are willing to repay the United States a substantial share of its cost. Consequently, I have concurred in the findings of the Board of Engineers for Rivers and Harbors and have recommended that local interests contribute $5,598,000 toward the reservoir-construction costs. I consider, however, that this case presents a question of general policy for consideration and decision by the Congress, namely: In projects of this type where only the question of the incidental use of supplemental water made available by flood control structures is involved, whether the local payment for the storage should be made to the United States as a direct contribution paid to the Treasury through the Secretary of the Army or whether repayment arrangements should be made under the requirements and procedures of the Bureau of Reclamation under Federal reclamation law.

"In order to utilize the irrigation storage provided by the ultimate plan of development for the Russian River Basin, additional works, including an adequate irrigation distribution system, will have to be installed. In view of this fact, I recommend that, prior to the authorization of the final stage of this project, the Secretary of the Interior prepare a plan for utilization of the irrigation storage provided by this final stage, in accordance with section 8 of the Flood Control Act of 1944."

Comments of the Secretary of Agriculture

"Agriculture in the Russian River Valley will be materially benefited by the improvements recommended in your report and they will in no way interfere with programs of the Department of Agriculture."

Comments of the director of natural resources, State of California

Gen. Warren T. Hannum, director of natural resources, by letter dated November 9, 1948, submitted the following comments on the report of the district engineer:

"Reference is made to your letter of September 27, 1948 transmitting for comment an advance report on the Russian River for flood control and allied purposes. We submit no comments on the effect of the proposed project on flood control, the use of conserved water for allied purposes, nor the justification of the requirements from local interests since these relate to functions of another State agency. This department is interested in its effect on recreation, including the conservation of fish life.

* * * * * * *

"The project if executed for control of floods and regulation of stream flow will enhance the development of recreation in the area and on this basis is favorably considered."

Conclusions of the State engineer, division of water resources, department of public works, State of California

"The following conclusions are submitted with respect to the improvements recommended by the Chief of Engineers in his proposed report, giving consideration to (*a*) need for the project, (*b*) engineering feasibility and effectiveness of the proposed works, and (*c*) economic justification for the project.

"(1) The improvements proposed would provide flood control on the East Branch of Russian River and its principal tributary Dry Creek and the conservation of water for irrigation, municipal, and recreational purposes.

"(2) The works proposed are feasible of construction and there is need for an initial development.

"(3) Local interest has been demonstrated by the fact that two flood control and water conservation districts comprising Sonoma and Mendocino Counties, respectively, have been formed by special legislative acts for the purpose of negotiating with the United States with respect to local participation in the project.

"(4) The benefit-cost ratios for both the ultimate and initial developments, as estimated by the district engineer, indicate the economic feasibility of the project.

"(5) Responsibility for maintenance of channel stabilization works proposed should not be delegated to the local interests until the effectiveness of such works has been demonstrated.

"(6) The State of California under section 18 of the State Water Resources Act of 1945 and section 1 of the Flood Control Fund Act of 1946, assumes responsibility for 'lands, easements and rights-of-way' for channel stabilization which, in this project, are listed as non-Federal costs in the sum of $30,000.

Recommendations

"1. It is recommended that initial channel stabilization works on the Russian River as proposed in the report under review, and a reservoir on the East Branch of the Russian River be authorized for immediate construction by the Corps of Engineers, Department of the Army, and that adequate funds be appropriated by the Congress for those purposes.

"2. It is recommended that with reference to an initial section of the channel stabilization works, the following provisions as set forth in the report of the district engineer be incorporated in the proposed report of the Chief of Engineers in lieu of provision (*c*) of paragraph 9 of the latter report:

" '(*b*) After construction, the initial channel stabilization works be maintained by the United States until the Chief of Engineers determines that the effectiveness of the works has been demonstrated by performance under flood conditions, and thereafter the remaining channel stabilization works be constructed.

" '(*c*) After the effectiveness of the initially constructed channel stabilization works has been demonstrated as provided for above, the responsibility for their maintenance and for the maintenance of the remainder of the channel stabilization works as soon as constructed, be assumed by local interests.'

"3. It is recommended that further studies be made of the feasibility and utility of reservoirs on other tributaries of the Russian River for the purposes of flood control and water conservation."

Quality of water

The following is quoted from bulletin No. 1, Water Resources of California State water resources board, 1951:

"Most fresh waters in California are of excellent quality and well suited to irrigation and other beneficial uses. This is especially true of drainage from the north coastal area and from the eastern side of the Central Valley area, both of which areas have large watersheds with high water yield. Analyses show that their surface and underground waters possess remarkably slight concentrations of salts, low percent sodium, and relatively small amounts of elemental boron. These waters are of the bicarbonate type, and calcium is the predominating base."

Summary and conclusions of the Whipple Engineering Co.

"As a result of our investigations and studies in water utilization from the Russian River, we have come to certain conclusions which are listed below:

"The future growth of Sonoma County is very clearly shown to be dependent upon the establishment of a reliable long-range water supply, which will be adequate to meet its anticipated future demands.

"The Russian River project as planned by the Corps of Engineers is the most economically feasible source of supply to meet future demands that has been proposed or can be visualized at this time.

"Multiple features of the reservoirs proposed enable the project to produce the highest degree of benefits at the lowest possible cost.

"The greatest economy will result by constructing Coyote Valley Reservoir to its ultimate capacity in two stages, the first stage to be 122,000 acre-feet.

"When additional supplies are needed to meet future demands, construction of Dry Creek Reservoir should be the second step in the program.

"Southern Mendocino County will receive the highest overall degree of flood-control benefits and will be assured of a firm water supply to meet future demands for irrigation, municipal, and domestic use.

"The most economically feasible method of distributing domestic-municipal water to southern Sonoma County and Marin County would be through a system of transmission mains with all filtration in a central plant.

"For distribution by mains, the most economic and feasible location for the river diversion would be just north of Wohler Bridge.

"Domestic-municipal water can be supplied to serve larger areas in southern Sonoma County at rates below the average presently charged by other water services in the bay area.

"As the demand for either domestic or irrigation water increases, the unit cost per acre-foot decreases.

"A joint agreement must be entered into, between the Sonoma County Flood Control and Water Conservation District, and the Federal Government, for the construction of Coyote Valley Reservoir and other flood-control improvements. Funds must be available at the time and in the amount required by the Federal Government for the proportionate share to be paid by local interests.

"To insure that the Russian River project and the distribution system will operate on an economically sound basis, it is imperative that all future supplies be obtained from this source. The lowest unit cost per acre-foot may be realized only by a full cooperation and participation of all areas in the utilization of this source to its greatest extent.

"There are six feasible reservoir sites which if developed could supply the Sonoma Valley area. Reservoirs constructed on all these sites would have a total capacity of 18,640 acre-feet and a seasonal yield of 9,800 acre-feet; however, the cost per acre-foot of yield from these sources would be considerably higher than if developed from the Coyote Valley Reservoir. Future demands for this area are anticipated to be greater than the total seasonal yield obtainable from these six reservoirs."

Memorandum to: The Congress of the United States
From: James F. Lyttle, chairman, Sonoma County Flood Control and Water Conservation District
Subject: Projects for flood control and allied purposes in the Russian River, Sonoma County, Calif.

GENTLEMEN: I very much appreciate the privilege of meeting with you and appearing as part of a delegation from California. We have previously submitted to you very complete briefs covering the objectives we have in protecting the Russian River watershed against severe flood damage and at the same time conserving water for all beneficial use. The average annual flood damage is more than $750,000 and several counties north of San Francisco Bay can be easily

served with an abundant cheap water supply from the Russian River. This area produces food and fiber, as well as a considerable number of industrial products that are necessary to the welfare of the Nation. Our ground water supply is rapidly becoming depleted and we must in the very near future develop surface storage as proposed in these projects. The Russian River projects have been authorized by all Federal authorities concerned following exhaustive studies by the Corps of Engineers. The projects have also been authorized by action of the State agencies involved in California. We have established a local authority competent to negotiate and enter into contracts with the Federal and State authorities, as well as any other that might be involved.

Recommended for immediate construction is the first stage of an ultimate two-stage dam and reservoir in Coyote Valley near Ukiah, Mendocino County, and one-third of the channel and stabilization works. During the last session of the Congress about one-half of the planning funds were appropriated, and we are now seeking $185,000 to complete these plans. We are advised that this amount will be sufficient to place the projects in the position of being ready for construction and unless these funds are provided by the Congress the project will be delayed for a considerable period of time.

The total project cost for the recommended immediate construction is around $16 million and our countywide flood control and water conservation district is committed to advance about $5,500,000 of this in cash in order to pay for the cost of conserved water of local benefit.

We have already expended more than $75,000 in planning our diversion works and distribution system, and are now completing our engineering and have just engaged a competent firm to thoroughly analyse the financing or our portion of the works that are necessary to deliver water to all of those who will need it. This is not strictly a local project because it will serve at least three and possibly more counties that are all in a position of urgently needing an additional supply of water.

In conclusion may we recommend that the Congress appropriate $185,000 to complete the plans for the Russian River projects in Sonoma and Mendocino Counties, Calif.

Many complete reports and briefs have been submitted previously to you and other members of the Congress, so in order to save time, may I merely make note of these because they should currently be in your files for reference and to substantiate the critical situation we face and the need for quick action.

Report of the Corps of Engineers, United States Army, dated September 9, 1948, as revised and approved by the division engineer, south Pacific division, the Board of Engineers for Rivers and Harbors, and the chief of engineering. (H. Doc. 585, 81st Cong. 2d sess.)

Condensed report prepared for Sonoma County Flood Control Water Conservation District by the Whipple Engineering Co., dated May 1950.

The report on utilization of water from the proposed Russian River project prepared for the Sonoma County Flood Control and Water Conservation District by the Whipple Engineering Co., dated October 1950.

Report to the Congress of the United States covering the Russian River projects in California prepared by north coast office, California State Chamber of Commerce, dated March 23, 1951.

Additional material prepared for current presentation dated May 14, 1953.

The Russian River project—extracts from Federal, State and district reports prepared by Paul L. Nichols, chief engineer, Sonoma County Flood Control and Water Conservation District, May 1, 1953.

A copy of the Redwood Journal published in Ukiah, Mendocino County, dated March 4, 1953.

INTRODUCTION OF LEGISLATORS

Senator KNOWLAND. I might say for the benefit of the Californians that are here for the first time that on my right is Senator Carl Hayden, of Arizona, the ranking Democrat on the full Appropriations Committee, and I might say he served in the House of Representatives with my father a good many years ago and has been a very good friend and associate all these many years, and we only have one slight problem that we differ on and that is relative to the Colorado River, but outside of that, in the past I think we have managed to be mutually helpful in solving the problems of our States.

Senator HAYDEN. My father and mother were married in California and came down to Arizona. I went back up to attend Stanford University when I was a young man, so I am fairly familiar with conditions in your State and am always glad to be helpful.

Senator KNOWLAND. I might say without again taking time out of your schedule here that we do have two Congressmen present, and Congressman Oakley Hunter has given me a statement to be filed when we come to the Pine Flat matter, but I was wondering whether Congressman Scudder at this time would have a statement that he would care to make or of course he could send the statement in, and if he wishes he can augment the statement in the record?

STATEMENT OF HON. HUBERT B. SCUDDER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

PREPARED STATEMENT

Representative SCUDDER. Senator Knowland and Senator Hayden, I will be very brief. I will ask that the statement I have prepared be filed in the record at this point.

Senator KNOWLAND. That will be done.

(The statement referred to follows:)

RUSSIAN RIVER PROJECT

Statement of Hon. Hubert B. Scudder, Member of Congress

Mr. Chairman and members of the committee, I appear before you today in behalf of the Russian River project located in my congressional district in California.

I believe that most of the members of the committee are quite familiar with this project, due to hearings held in 1951 and again in 1952. A record of the same may be found on page 842 of hearings held before this committee on July 19, 1951; and on page 382 of hearings held May 2, 1952.

The Russian River project was authorized May 17, 1950, by Public Law 516, 2d session of the 81st Congress. Appearances before this committee and its counterpart in the House by myself and representatives from the area concerned, resulted in money being made available to the Corps of Engineers in 1952 for the commencement of planning phases of the project.

The survey has been progressing satisfactorily, and if the engineers are granted sufficient funds they will be able to complete the planning phases and be prepared to let bids for construction.

The Russian River watershed commences in east-central Mendocino County, and runs through a large portion of Sonoma County. It embraces approximately 1,500 square miles of a highly populated and productive area. The project is a multipurpose one in that it will provide means for flood control as well as establishing a water-supply source—for which there is a dire need.

As has been pointed out before, local authority has been established which is competent and anxious to enter into negotiations with Federal and State authorities to provide a considerable portion of the money involved.

The city of Santa Rosa, the largest city in the watershed, is facing an extremely dangerous situation due to shortage of water for domestic, commercial, and agricultural use. There is great anxiety on the part of residents of this city to have construction of the Russian River project started as quickly as possible.

The ever-increasing water shortage in that area is reaching alarming proportions while, at the same time, floodwaters from the Russian River cause yearly damages in excess of $750,000 to property and agricultural lands.

Since World War II the population of this area has increased by 60 percent. Employment has increased by 64 percent, and the value of manufacturing enterprises has shown a 23¢-percent increase. Due to its accessibility to the metropolitan San Francisco Bay area, this section of northern California contains

highly desired potential sites for industrial location, and it offers a great appeal for residential development.

The main obstacle to a full realization of the potentiality of this area lies in the shortage of water. The Russian River project is the anwer to this problem, and it can be developed upon lines already approved by the Congress and the Army engineers if the balance of funds are made available to carry out the work already commenced.

I respectfully urge this committee to favorably consider the allowing of sufficient money in order to bring the planning to a point where contracts for some construction can be let in fiscal 1955, and thereby relieve the anxiety of the people affected.

ACCEPTABILITY OF PROGRAM

Representative SCUDDER. I have several telegrams showing the interest of the people in Mendocino County in the project also. There have been rumors of opposition up there, but the program is very acceptable, and I feel if adequate money is provided at this time we can finish the planning money to be ready for the letting of contracts next year if money is provided.

Former mayor of Santa Rosa, Mr. Daw, is present. If you could just give him a word I would appreciate it very much.

Senator KNOWLAND. On this same project?

Representative SCUDDER. The Russian River project.

Senator KNOWLAND. Thank you.

CITY OF SANTA ROSA, CALIF.

STATEMENT OF J. M. DAW, MEMBER OF THE CITY COUNCIL AND CHAIRMAN OF THE BOARD OF PUBLIC UTILITIES

CONTRIBUTION OF CITY

Mr. DAW. Mr. Chairman, I shall be brief. I support Mr. Lyttle's statement and concur in that in full. I have a printed statement defining and outlining the position of Santa Rosa in relation to this project. It is generally contended without support of Santa Rosa that the project is not financially sound and feasible. We have entered into a firm commitment to the extent of $250,000 annually toward the amortization of the cost of this project, but it is limited in time. It is contingent that this project be under way by the year 1955, otherwise we must seek an independent source of water by reason of critical conditions that have developed and are developing now.

We are threatened with injunction proceedings against taking additional water from underground storage, depleting that source. It is a real threat.

So, Mr. Chairman, I ask your consideration in the matter of time. If the Russian River project is not well under way by the time stipulated by the aforesaid commitment, Santa Rosa will be forced to seek an independent source of water and withdraw its support of the project.

Senator KNOWLAND. Your statement will be printed in the record.

(The statement referred to follows:)

STATEMENT BY J. M. DAW, MEMBER OF THE CITY COUNCIL OF THE CITY OF SANTA ROSA AND CHAIRMAN OF THE BOARD OF PUBLIC UTILITIES OF THE CITY OF SANTA ROSA

1. The city of Santa Rosa is a potential customer for 5,000 or more acre-feet annually of water to be developed by the proposed Russian River project, commonly known as Coyote Valley Dam. (See resolution by the city council under date of November 14, 1950, attached hereto as exhibit 1.)

2. The financial success of the aforesaid project is dependent upon the firm commitment and continuous support by the city of Santa Rosa.

3. The city of Santa Rosa has served notice upon the board of supervisors, as trustees of the Sonoma County Flood Control and Conservation District, that the expiration date of the aforesaid commitment for 5,000 acre-feet of water cannot, under any circumstances, be extended beyond the year 1955 due to the depletion of underground storage and increased consumption. (See resolution by the city council under date of November 18, 1952, attached hereto as exhibit 2.)

4. The board of public utilities of the city of Santa Rosa is now serving 9,510 customers as of date of January 1, 1953, reflecting an overall population of approximately 34,000 people.

5. The city of Santa Rosa is dependent upon underground sources for its entire domestic and industrial needs except for a storage of approximately 300 acre-feet.

6. The underground storage is not adequate to meet the current needs of the city of Santa Rosa and the rural area immediately adjacent thereto. (See city engineer's report under date of April 30, 1953, attached hereto as exhibit 3.)

7. The costs of development of additional storage for temporary use and on a short-term amortization is prohibitive. On a long-term amortization the estimated costs to develop storage sufficient for current and future needs of Santa Rosa, independent of the Russian River project, is approximately the same per acre-foot as set forth in the aforesaid commitment ($48 per acre-foot). (See engineer's report under date of April 30, 1953, attached hereto as exhibit 3.)

8. That on September 2, 1952, the board of public utilities, authorized the city engineer to proceed to develop an additional well to supplement our present output.

9. That the aforesaid proposal to develop an additional well met with vigorous protest and threat of injunction against the city of Santa Rosa by rural residents. (See petition under date of November 5, 1952, attached hereto as exhibit 4. Also see copy of Santa Rosa Press Democrat dated February 20, 1953, and copy of Santa Rosa Press Democrat dated March 3, 1953.)

10. The proposed injunction is no idle threat, being based upon recent litigation, via: California cases, *City of San Bernardino* v. *City of Riverside*, 18607 198 P. 784, 1921; *City of Pasadena* v. *City of Alhambra et al.*, 3302d 908, 207 P. 2d 17, 1949.

1. Time is of the utmost importance in dealing with the aforesaid critical conditions. If the Russian River project is not well under way by the time stipulated by the aforesaid commitment, Santa Rosa, will be forced to seek an independent source of water and withdraw its support of the project.

In conclusion, it is the firm conviction of the members of the city council and the Board of Public Utilities of the City of Santa Rosa that prompt action by this Congress is required to insure continuous development and early completion of the proposed Russian River project. This conclusion is based upon the urgent need of flood control and the requirements of agriculture in this area as presented by Mr. Lyttle, a member of this delegation. The support offered by the city of Santa Rosa is a vital factor in the amortization of its cost. I therefore urge favorable consideration of the required appropriation for this project.

RESOLUTION NO. 3849—RESOLUTION REAFFIRMING NEEDS AND COMMITMENT OF CITY OF SANTA ROSA TO RECEIVE WATER FOR DOMESTIC DISTRIBUTION FROM THE SONOMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT PROJECT COMMONLY KNOWN AS THE RUSSIAN RIVER PROJECT

Whereas, on the 14th day of November 1950, the city council of the city of Santa Rosa adopted its resolution 3389 setting forth the need of the city of Santa Rosa for additional supply of water for domestic distribution, and

Whereas developments of the past 2 years have revealed a lowering of the water table and an increasing consumer demand upon the city in excess of original expectations; and

Whereas this council, in recognition of the fact that what benefits Sonoma County benefits the city of Santa Rosa, is willing to delay determination and location of additional sources of water insofar as possible in order to participate in the Russian River project financially and promotionally, but facts available to this council indicate that this city will require a substantial additional supply of water for domestic distribution within not more than 5 years from the date hereof and in order to protect the consumers dependent upon this city must have determined the source and commenced development thereof not later than during the year 1955: Now, therefore, be it

Resolved by the council of the city of Santa Rosa that this city in support of the immediate urgency of completion of plans and undertaking of construction of the Coyote Valley phase of the Russian River project reaffirms its commitment of its resolution 3389 that the city council of the city of Santa Rosa "is prepared to enter into a contract with the Sonoma County Water and Conservation District for the use of a minimum of 5,000 acre-feet of filtered water annually at a cost not to exceed $47.80 per acre-foot annually for a period of 50 years, provided that the city of Santa Rosa may elect to receive 6,000 acre-feet annually of raw water in lieu of filtered water at a cost not to exceed $31 per acre-foot, and provided further that this amount of water, at the option of the city of Santa Rosa, may be increased from time to time to a maximum of 15,000 acre-feet annually;" and it is further

Resolved that this council is prepared to assist in every way possible in the promotion and work of converting the Russian River plan into a reality.

In council duly passed this 18th day of November 1952.

Approved. ALEX MCCLUSKEY, *Mayor.*
Attest: AGNES S. FARQUAR, *City Clerk.*

RESOLUTION NO. 3389—RESOLUTION URGING FORMATION OF THE SONOMA COUNTY WATER AND CONSERVATION DISTRICT AND THE APPROPRIATION BY THE FEDERAL GOVERNMENT OF FUNDS AS NECESSARY TO CONSUMATE CONSTRUCTION OF RUSSIAN RIVER PROJECT AS SET FORTH IN H. R. 5472, 81ST CONGRESS

Whereas a critical shortage of water is developing in and adjacent to the city of Santa Rosa and elsewhere in the county of Sonoma, State of California; and

Whereas at the present time the city of Santa Rosa is dependent upon wells or underground storage for its principal source of supply; and

Whereas underground storage as a dependable source of supply in this area is now jeopardized by a progressive lowering of the water table and an ever-increasing consumer demand; and

Whereas it appears as an urgent necessity that the city of Santa Rosa proceed immediately to develop new sources of supply and to this end construction of storage basins of adequate capacity in adjacent areas having sufficient runoff during the rainy season is under consideration; however, preliminary studies indicate that the proposed development of the Russian River through the formation and operation of the Sonoma County Water and Conservation District offers the best and most economic solution of our water problems, and would be the most beneficial to this entire geographic area; and

Whereas preliminary surveys by the trustees of said district indicate that sufficient water can be furnished by said district to meet the needs of Santa Rosa at a cost comparable to that of other projects under study by the said city of Santa Rosa; and

Whereas the city council of Santa Rosa is prepared to enter into a contract with the Sonoma County Water and Conservation District for the use of a minimum of 5,000 acre-feet of filtered water annually at a cost not to exceed $47.80 per acre-foot annually for a period of 50 years;

Provided, That the city of Santa Rosa may elect to receive 6,000 acre-feet annually of raw water in lieu of filtered water at a cost not to exceed $31 per acre-foot;

And provided further, That this amount of water, at the option of the city of Santa Rosa, may be increased from time to time to a maximum of 15,000 acre-feet annually: Now, therefore, be it

Resolved by the City Council of the City of Santa Rosa, That the Board of Supervisors of the County of Sonoma, State of California, be respectfully requested and urged to proceed without further delay the needed development of said Russian River project through the formation of the Sonoma County Water and Conservation District; and be it further

Resolved, That the Federal Bureau of the Budget be respectfully requested to approve and include in the current national budget an appropriation for the cost of the Federal Government's participation in said project as set forth in H. R. 5472, 81st Congress.

In council duly passed this 14th day of November 1950.

Approved:

WARD H. VON TILLOW, *Mayor.*

Attest:

AGNES S. FARQUAR, *City Clerk.*

CITY OF SANTA ROSA, CALIF.,
OFFICE OF THE CITY ENGINEER,
Santa Rosa, Calif., April 30, 1953.

BOARD OF PUBLIC UTILITIES,
City of Santa Rosa, Calif.,
Santa Rosa, Calif.

GENTLEMEN: Consumption of water by customers of the city of Santa Rosa has increased, at an almost uniform rate, 106 percent in a 10-year period (see chart A). Granting that this growth may not maintain that rate of 10.6 percent a year, it is still logical that the increase will average 5 percent a year for the next 3 years and reach an annual demand of 1,700,000,000 gallons, or 5,200 acre-feet, in 1956.

Our presently available annual supply is estimated at 1,500,000,000 gallons which will be exceeded by the anticipated demand in 1954. However, because of falling water levels in our underground supply (see table B) and the general California history of diminishing yield from underground supply, this figure cannot be guaranteed.

Since the drilling of additional wells is threatened by injunction we have investigated availability of low-cost, low-capacity, surface storage in streams near Santa Rosa, namely Santa Rosa and Sonoma Creeks.

Rough estimates indicate that this supply would demand immediate outlay of at least the following:

Construction costs	$210,000
Rights-of-way, property damages, road relocations	75,000
Incidentals	30,000
Total	315,000

to provide storage of less than 350 acre-feet, making this expedient financially not feasible at an acre-foot cost of $900.

Before the Coyote Valley-Russian River project was considered we had investigated possible long-range, high-capacity surface storage for the city of Santa Rosa and found it possible to secure and construct this storage on Mark West Creek for a cost of $157 per acre-foot. This plan would entail additional expenditures for treatment and transmission facilities, making it as costly as purchase of water from the Russian River project. It is, however, still available, and will have to be undertaken by the city of Santa Rosa if the Russian River project is not to be completed before our needs greatly exceed our supply.

Respectfully submitted.

FRANK B. SARLES, *City Engineer.*

TABLE B.—*Lowest pumping level (feet from ground surface to water level) recorded in 3 city wells between 1949 and 1952, with rainfall during same period*

Year	Well No.			Rainfall
	4	5	6	
1949	240	147	.....	17.40
1950	240	126	145	40.52
1951	207	65	136	28.98
1952	170	135	156	38.10

To Hon. Alex McCluskey, Mayor, and to the Councilmen of the City of Santa Rosa:

We, the undersigned, residents of Sonoma County, Calif., and owners or occupants of real property within the general vicinity for the location of new proposed municipal wells, respectfully, severally, represent that the use and value of our respective properties is critically dependent for water from wells existing and in use on our respective properties, and that the basic water supply available generally in our respective wells is definitely limited in amount, and that said supply of water, at the present time, is dangerously low for existing and prospective use. It is our considered judgment that any further wells undertaken for municipal purposes, in the general vicinity of our respective properties, would seriously burden the existing underground waters of our properties, and would effectively rob our respective wells of all water. Wherefor, we respectfully urge that the city of Santa Rosa, seek out other places or means for the desired replenishment of its supply of water.

Name	Address	Date
Mr. and Mrs. W. Arnold (owner)	2461 Summerfield Rd	Oct. 16, 1952
Charles R. Jones (owner)	2520 Summerfield Rd	Do.
Mr. and Mrs. M. Bertolani (owner)	2618 Summerfield Rd	Do.
Mr. and Mrs. C. Cartwright	4775 Summerfield Rd	Oct. 17, 1952
Eleanor E. Bowles	4785 Newanga Ave	Oct. 18, 1952
Mr. and Mrs. V. M. Gedge	4770 Newanga Ave	Do.
F. L. Sandusky	2195 Summerfield Rd	
Era Sandusky	do	
Ethel M. Jamison (owner)	2460 Summerfield Rd	
Marshall Parr Jamison (owner)	do	
Bernice Delson (owner)	2711 Summerfield Rd	
H. J. Delson (owner)	do	
Robert M. Rapp	2717 Summerfield Rd	
Mrs. Margorie Rapp	do	
Mrs. Neera A. Hodapp	2808 Summerfield Rd	
Violet Reed	2810 Summerfield Rd	
Al M. Murray	3001 Summerfield Rd	
Mrs. Al Murray	do	
Mr. and Mrs. R. L. Van Dusen (owner)	4753 Newanga Ave	
Mr. and Mrs. Frank Eliggi	5020 Newanga Ave. (owners)	
W. D. Smith	5380 Newanga Ave	
Elizabeth J. Bartlow (owner)	5530 Newanga Ave	
James Bartlow	do	
William R. Warren	2280 Summerfield Rd	
Adaline W. Warren	do	
Harvey W. Campbell	5585 Newanga Ave	Oct. 18, 1952
Mrs. Lillian Shuker	1815 Summerfield Rd	Do.
J. E. Dunn	do	Do.
G. Afferanchino	1720 Summerfield Rd	
D. Sangiacomo	do	
Eric W. Carlson	2000 Summerfield Rd	
Mrs. Patricia Carlson	do	
George D. Cantrall	Summerfield Rd	
Mrs. Gertrude M. Cantrall	2033 Summerfield Rd	
George Cantrall	do	
Dan M. Freer	1436 Summerfield Rd	
Thomas D. Welch	1424 Summerfield Rd	
John S. Collins	1412 Summerfield Rd	
E. E. McNeill	1344 Summerfield Rd	
Jack E. Boyce	1285 Summerfield Rd	
C. Carry	1260 Summerfield Rd	
Emerson Puck	1800 Summerfield Rd	
June Puck	do	
Nina J. Voss	4265 Sonoma Ave	
Ferd E. Hecker	5190 Newanga Ave	
Mrs. Helen Heaton	4807 Newanga Ave	
A. B. Heaton	do	
James Anderson	4961 Newanga Ave	
Mrs. Edith Anderson	do	
Thomas H. Fruiht	5099 Newanga Ave	
Wayne L. York	3755 Mayette Ave	
Mrs. H. Zwick	4930 Newanga Ave	Oct. 27, 1952
Mrs. Thomas H. Fruiht	5099 Newanga Ave	Do.
W. J. Keifer	5325 Newanga Ave	
Mrs. W. J. Keifer	do	
Ernest Lombella	5490 Newanga Ave	Oct. 31, 1952
Robert G. Maxwell	5572 Newanga Ave	Do.
Floyd J. Hull	5000 Newanga Ave	
Mrs. L. M. Baldwin	do	
John Medica	1276 Summerfield Rd	
Roy A. Taylor	5310 Newanga Ave	
Mr. & Mrs. James Dickerson	1276 Summerfield Rd	
Frank Christian	do	
Kate H. Mack	1155 Yulupa Ave	

Name	Address	Date
Mrs. M. Roads	4325 Mayette Ave	
Emil E. Cornelius	4360 Mayette Ave	
Lillian M. Cornelius	do	
Robert Morgan	1247 Yulupa Ave	
Blanche A. York	3755 Mayette Ave	
E. J. Toschi	1974 Hoen Ave	Oct. 27, 1952
H. L. Sams	1980 Hoen Ave	Do.
Martin Wickerly	2457 Hoen Ave	Do.
Cora B. Woodward	2500 Hoen Ave	
J. A. Adams	2495 Hoen Ave	
Kenneth E. Manies	2917 Hoen Ave	Oct. 27, 1952
F. R. Way	3000 Hoen Ave	Do.
Marion Nalley Kohl	3055 Hoen Ave	Do.
Helen Moore	3150 Hoen Ave	Do.
D. C. Tenter	3131 Hoen Ave	Do.
H. Cordser	3317 Hoen Ave	Do.
Mayme J. Robertson	3625 Hoen Ave	
Adelina Wattson	3768 Hoen Ave	
Louise Beck	3720 Hoen Ave	
Frank J. Cooper	3955 Hoen Ave	
John Bernardi	1785 Yulupa Ave	
Harry K. Miller	1780 Yulupa Ave	
J. M. Goode	4245 Hoen Ave	
S. Cabazet	4250 Hoen Ave	
J. C. Wood	4313 Hoen Ave	
C. H. Butler	4343 Hoen Ave	
J. G. Fedmer	1967 Summerfield Rd	Oct. 27, 1952
M. E. Nunes	3446 Summerfield Rd	
Mary D. Nunes	do	
Thomas E. Shaw	5499 Newanga Ave	Nov. 2, 1952
Isabel G. Shaw	do	Do.
Sam Shuker	1815 Summerfield Rd	Do.

I hereby certify that the foregoing is a true and correct copy of a petition filed with the City Council of the City of Santa Rosa at a regular meeting held November 5, 1952.

AGNES S. FARQUAR,
City Clerk of the City of Santa Rosa, Calif.

Senator HAYDEN. Although I never visited Santa Rosa, my mother always talked to me about how wonderful it was and the fine people there. I have always wanted to go there.

Mr. DAW. Senator, I want to say to you that since visiting this Maryland section I must say that California is not very far ahead of Maryland if any, and that goes for the people, too.

Senator KNOWLAND. Thank you very much, Mr. Daw.

Mr. DAW. Thank you, gentlemen.

COYOTE VALLEY DAM, RUSSIAN RIVER, CALIF.

Senator KNOWLAND. The committee has received a statement of opposition by Mendocino County, Calif., Farm Bureau to planning funds for Coyote Valley Dam, Russian River, Calif. That statement will be placed in the record at this point.

(The statement referred to follows:)

STATEMENT OF OPPOSITION BY MENDOCINO COUNTY, CALIF., FARM BUREAU TO REQUESTED APPROPRIATION TO UNITED STATES ARMY ENGINEERS FOR FURTHER SURVEYS OF RUSSIAN RIVER IN CALIFORNIA OR FOR PREPARATION OF PLANS FOR COYOTE VALLEY DAM IN THE RUSSIAN RIVER WATERSHED, CALIFORNIA

The United States Corps of Army Engineers has heretofore filed a report recommending certain works on the Russian River in California, including the construction of a dam in Coyote Valley, Mendocino County, Calif.

The Mendocino County Farm Bureau has gone on record in opposition to the plan. A statement of this opposition has been filed with Hon. Glenn Davis, of the House Appropriations Committee, and with Kenneth J. Bousquet, secretary of the Senate Appropriations Committee, together with duly certified copies of my authority to appear for the Farm Bureau with full authority to act.

It is requested that this statement be made a part of any hearing before either committee in connection with any requests by the Army engineers for further funds, either directly or indirectly, in connection with the Russian River projects. Because of the expense involved, it is impossible for the Farm Bureau to send witnesses to Washington to give oral testimony at the hearing.

The report of the Army engineers estimates that the initial estimated cost of the Coyote Valley Dam is $17 million, of which amount approximately $5 million is to be provided by local interests. The local interests involved are Sonoma and Mendocino Counties in California, Sonoma County being downstream from Mendocino. The ultimate cost cannot be estimated, but, from past experience it is safe to assert that it will be vastly in excess of $17 million.

To date there has been no expression by the taxpayers of either Sonoma or Mendocino Counties that they approve the project and are willing to bond themselves to contribute a minimum of $5 million as the share of the local interests.

An enabling act was passed in 1949 by the California Legislature creating the Mendocino County Flood Control and Water Conservation District (1949 Cal. Stat. p. 1811). A similar act was passed in 1949 creating the Sonoma County Flood Control and Water Conservation District (1949 Cal. Stat. p. 1793).

Each of these acts provides that the supervisors may delineate zones of benefit from the project and then submit to the voters of the counties the question of whether the zones so proposed should be approved. The acts also provide for submission of a bond issue to the voters to raise funds needed to provide the local contribution.

To the present there has been no expression by the voters of either county relative to the project. It is recognized that an election for a bond issue cannot be held until a definite amount is determined.

However, legal machinery has been provided to vote on the creation of zones of benefit in each county and for an election to determine whether the proposed zones should be approved. This machinery was provided 4 years ago but no election has been held.

The project, according to the report of the United States Army engineers, is entirely conditioned upon approval of it by local interests and the contribution by local interests of a minimum of approximately $5,000,000.

It is the position of the Mendocino County Farm Bureau that no further expenditure of Federal funds should be made on this project unless and until it is approved by a vote of the people in the counties of Sonoma and Mendocino, or either of them. If further expenditure of Federal funds is made and the local interests when an election is held later do not approve the plan and are unwilling to participate it would appear that it would be a great waste of public funds. The project requires agreement and cooperation between the Federal Government and the local interests. No public officer of either Mendocino or Sonoma Counties can make a definite commitment to furnish funds toward the project and before it can actually go forward, there must be a meeting of minds by the Congress of the United States through an appropriation and the people of the areas involved expressed by and through an election. It has been estimated that a sum in excess of $500,000 would be required to prepare plans and specifications and that smaller sums would be required for preliminary surveys and investigations.

The report of the Army engineers has been approved, Congress has authorized the project about 2 years ago, but to date nothing has been done to determine the attitude of the people of the counties involved.

It is the position of the Mendocino County Farm Bureau that under existing California law referred to above, before any further expenditures are made approval of the project should be obtained through an election in the counties concerned and if existing legislation is not adequate, further legislation should be enacted by the State of California. In short, it does not seem to be sound economy to spend large sums of public money on a proposed project unless there is assurance that the project will be consummated.

Accordingly, the Mendocino County Farm Bureau urges that no further appropriations be made in connection with the Russian River project by direct act of Congress and that no sums be appropriated to the Army engineers which could be diverted for that purpose until such time as approval of the project is assured by a vote of the people of the areas involved in California.

It might further be added that the Mendocino County Farm Bureau is opposed to the Federal Government either through the Army engineers, or the Reclamation Bureau, entering into any project having to do with the Russian River in California. The Russian River has its source in Mendocino County and empties

into the Pacific Ocean in Sonoma County. The entire course of the stream is wholly within the counties of Mendocino and Sonoma. The Farm Bureau believes that whatever should be done, if anything, is a problem for the counties involved and the State of California. The construction of this proposed dam not only involves the taking from the tax rolls of valuable property in Mendocino County, but it also involves valuable water rights along the Russian River which should be a matter for determination in California by the California Division of Water Resources and the courts of California.

In conclusion, every effort should be made during these trying times to avoid useless expenditures and waste. It would be sheer folly to spend further Federal money in connection with the proposed Russian River project unless there is an expression of approval of the project by the voters of the local areas.

Respectfully submitted.

CHARLES KASCH,

P. O. Drawer 418, Ukiah, California, Attorney for Mendocino County Farm Bureau.

Mr. GRIFFITH. I would like to call Mr. Douglas B. Cohen, member of the State reclamation board.

RECLAMATION BOARD OF CALIFORNIA

STATEMENT OF DOUGLAS B. COHEN, MEMBER

PREPARED STATEMENT

Mr. COHEN. Mr. Chairman, I am Douglas B. Cohen, a member of the State reclamation board, whom I am representing at this hearing. I am filing a prepared statement which I think is pretty factual, and I would like to have it made a part of the record.

Senator KNOWLAND. That will be printed at this point as part of the record.

(The statement referred to follows:)

STATEMENT OF DOUGLAS B. COHEN, A MEMBER OF THE RECLAMATION BOARD OF CALIFORNIA

Mr. Chairman and members of the committee, my name is Douglas B. Cohen, residing at Stockton, San Joaquin County, Calif. I am presently farming 2,000 acres of highly developed land situated in the San Joaquin River delta. On behalf of the reclamation board of the State of California, of which I am a member, I am presenting this statement in support of Federal appropriations for the 1954 fiscal year for flood-control projects in the State of California. With your permission, I would like to have it inserted in the printed record.

For the past 40 years the reclamation board has functioned as the agency, designated by the Legislature of the State of California for purposes of cooperation with the Federal Government through the Corps of Engineers, United States Army, in the planning and construction of flood-control work on the Sacramento and San Joaquin Rivers and their tributaries.

The reclamation board consists of seven members who are appointed by the governor and serve at his pleasure. They receive no compensation other than a nominal per diem for attendance at meetings, plus travel expenses. These members are selected by the governor from various areas of the Sacramento and San Joaquin Valleys because of their familiarity with the flood problems of the region in which they reside.

My board has authorized me to support all the recommendations which have been presented to you at this hearing by Mr. C. A. Griffith, chairman of the State water resources board, and specifically those items which affect primarily the Sacramento District of the Corps of Engineers. This program has been considered very carefully by the State water resources board and the reclamation board. Those items which primarily concern my board, together with the funds requested for the fiscal year 1954, are as follows:

Sacramento district:	
Construction funds:	
Cherry Valley (Tuolumne River watershed)	$2,049,000
Folsom Dam (American River)	15,000,000
Merced County stream group	546,000
Pine Flat Dam (Kings River)	3,150,000
Sacramento River, old flood-control project	5,000,000
Sacramento River, major and minor tributaries	1,868,000
San Joaquin River levees and revetment	800,000
Total	28,407,000
Planning funds:	
Black Butte Dam (Stoney Creek)	100,000
New Hogan Dam (Calaveras River)	200,000
New Melones Dam (Stanislaus River)	100,000
Success Reservoir (Tule River)	100,000
Terminus Reservoir (Kaweah River)	100,000
Total	600,000
Total, Sacramento district, Corps of Engineers	29,007,000

I wish to emphasize that the reclamation board considers it a matter of urgency that all funds be made available in the amounts recommended to your committee by the Water Resources Board of California.

Old Sacramento River flood-control project

The old flood-control project on the Sacramento River includes protection to practically all of the 1 million acres lying on the floor of the Sacramento Valley that are subject to floods. The area extends from Ords Ferry on the north to Collinsville on the south, a river distance of about 184 miles. It also includes the Feather, Bear, Yuba, and American Rivers from where their channels leave the high ground in the mountain foothills, together with large flood-carrying tributaries such as Butte Creek, Putah Creek, Cache Creek, Willow Slough, Cache, and Lindsey Sloughs, and other smaller contributing streams feeding the main river channels on both sides of the Sacramento Valley.

Last year an appropriation of $1 million was made for the old Sacramento River flood-control project. This year former President Truman's budget included the sum of $4,800,000. The recommendation of the water resources board presented to your committee for the 1954 fiscal year is $5 million. The State reclamation board considers the appropriation of this sum very necessary, not only because the project provides protection from floods to a large and important area but for the following special reasons:

On May 14, 1948, the Federal Bureau of Reclamation closed the outlet gates on Shasta Dam, and all flow of water through the dam was stopped, apparently without consideration of the damage that might thereby result to downstream flood-control works on the Sacramento River. This caused a very sudden lowering of the water surface which at Colusa amounted to some 8.6 feet in about 48 hours, suddenly releasing the supporting hydraulic pressure against the river banks which had been practically constant for a considerable period of time. This sudden withdrawal of support caused the collapse and slippage into the river of extensive sections of saturated river banks and in instances the levees thereon, between Colusa and Knights Landing, a distance of about 50 miles.

The Corps of Engineers during the past 3 years has expended, or has under contract, approximately $3,710,000 of Federal funds for the repair of this damage, the total estimated cost of which repair work is $4,400,000. This sum, had the necessity not arisen for these emergency and man-caused repairs, would have been utilized on new construction, with the result that the project would be much nearer completion than it now is. The State of California has contributed over $700,000 for rights-of-way in connection with these levee repairs which also would have been otherwise expended on new construction in connection with the old Sacramento River flood-control project.

We believe part of the Federal appropriation for the 1954 fiscal year may be allocated by the Corps of Engineers to further repair on these levee slips.

Ample State funds are available for cooperative work with the Federal Government on this project.

Sacramento River major and minor tributaries

The water resources board recommends an appropriation of $1,868,000 for work on the Sacramento River major and minor tributaries project. This amount would be divided as follows: $643,000 for completing work already started on Little Chico and Butte Creeks and would complete this unit and provide protection to highly developed property upstream of where Butte Creek crosses the State highway; $450,000 for completing work already started on Chico and Mud Creeks and Sandy Gulch; $755,000 for constructing work on Cherokee Canal, the total cost of which is estimated at $1,550,000. All these units dovetail together and all are necessary for the protection from floods of the general area surrounding the town of Chico. Damages in this area from the December 1937 flood, and from later floods, have totaled some $900,000. (See S. J. Res. 14 attached.)

Among the critical areas within the old Sacramento River flood-control project that lack adequate protection from floods is Butte Basin. Remedial measures for the protection of that basin from floods will be greatly facilitated by the construction of Black Butte Dam, a unit of the Sacramento River major and minor tributaries project, for which $100,000 advance planning funds are contained in the recommendations made by Mr. Griffith. We heartily support this recommendation. (See S. J. Res. 22, passed by the California Legislature on Apr. 8, 1953; ch. 86, Statutes of 1953, copy attached hereto.)

American River

The reclamation board recognizes the paramount necessity for the completion of Folsom Dam on the American River. Not until certain stages of the dam construction are completed can flood storage be provided so that the much-needed protective levees along the American River upstream from California's capital city of Sacramento can be extended.

House Document 367, 81st Congress, 1st session, contains the following comments regarding the extension of the existing American River flood-control levees, page 41, paragraph 43:

"Extensive housing developments along the American River in the environs of and in the suburban area immediately east of Sacramento, undertaken since the preparation of the basis report, have necessitated a reconsideration of the adequacy of the degree of protection that would be provided in such areas upon completion of the Folsom project. Such study has resulted in the conclusion that the present project levees should be extended upstream to supplement that protection which would be provided by the Folsom project in order to fully utilize the present levee channel capacity of the American River in the vicinity of Sacramento without creating an unsafe hazard in the newly developed areas upstream therefrom."

The record floods of November and December 1950, on the American River watershed resulted in the inundation of 5,440 acres of highly developed suburban lands, forced the evacuation of 4,500 residents in the environs in the city of Sacramento and caused estimated damage totaling $2,936,000.

Had the proposed levee extension been in existence and Folsom Reservoir in operation during the 1950 floods, according to estimates made by the Corps of Engineers, damages totaling $2,700,000 could have been averted and 3,000 residents would not have been driven from their homes.

Senators W. S. Knowland and T. H. Kuchel of Californina, on February 6, 1953, introduced S. 1286 which would adopt the recommendation of the Chief of Engineers contained in House Document 367, 81st Congress, for the extension of the American River levee, and which would authorize the appropriation of $1,300,000 to carry out the project in accordance with the plans and recommendations contained in the House document. On the same date, Congressman John E. Moss introduced H. R. 2732 which would provide for the inclusion of the additional levee and channel improvements needed for local protection on the American River, as recommended by the Chief of Engineers in House Document 367, in the flood-control project for the Sacramento River Basin as enacted by the act of March 1, 1917, and subsequently amended and supplemented.

San Joaquin River flood-control project

The San Joaquin River as it traverses the large, rich San Joaquin Valley, bisects an area of about 5,000 square miles north of Kings River and south of the Sacramento River. The San Joaquin River rises in the high Sierra Mountains and flows generally southwest to vicinity of Mendota, thence north and west to its junction with the Sacramento River near Antioch, a total length of 380 miles.

The San Joaquin River is augmented by the Kings, Fresno, Merced, Tuolumne, Stanislaus, Mokelumne, and Cosumnes Rivers, together with numerous large

creeks, until it reaches the combined magnitude of a record flood flow of 253,000 c. f. s. at Antioch.

California farm income

California, according to data released by the Bureau of Agricultural Economics, United States Department of Agriculture, February 25, 1953, leads all other States in farm income, namely, cash receipts from farm marketing in amount of $2,807,318,000.

Crop values in 4 of the counties traversed by the San Joaquin River show a remarkable gain in the 10 years from 1941 to 1951, according to reports of State department of agriculture listed as follows:

Crop value to farmer

County	Year 1951	Year 1941	Increase in 10 years [1]
San Joaquin	$161,412,236	$56,414,130	$104,998,110
Stanislaus	127,048,452	35,953,644	91,094,810
Merced	117,580,856	34,834,750	82,746,110
Fresno	325,579,150	58,530,099	267,049,050
Total 4 counties	731,620,700	185,732,620	545,888,080

[1] Increase in 10 years is 294 percent of 1941 values.

The total area of highly developed fertile land subject to inundation by floodwaters of lower San Joaquin River and its delta is approximately 250,000 acres. This area is fast increasing in both value and population. These increases add greatly to the flood hazard, involving loss of life and property, and emphasizes the necessity for immediate action toward flood protection.

Flood damages

In this period of national emergency, it is proper to invite your attention to the transportation arteries of prime military importance running east, west, north, and south through the Sacramento and San Joaquin Valleys. Almost every flood creates damages to the railroads and the national and State highways, which interrupt the flow of products essential to the economic welfare of the Nation.

The War Department has the largest quartermaster supply storage facility in the United States at Lathrop, about midway between Stockton and Mossdale which is on the San Joaquin River at the head of the delta. This facility is Sharpe General Depot, and together with its annexes or satellite fields at Tracy, Stockton, and Sacramento already has cost some $25 million. It has 7 million square feet, in addition to more than twice that amount of open storage space. It is designed to handle the greatest tonnage of any general Army supply depot in the United States.

During the flood season of 1950–51, levee breaks along the right and left banks of San Joaquin River washed out Highway 50, the main line of the Southern Pacific Railway, and transcontinental telephone cables, and all traffic over these routes was out of commission for about 3 weeks. This seriously impaired transportation to and from the Quartermaster supply depots at Tracy, Lathrop, Stockton, and Stockton Field, all of which are located within the area to be protected by the proposed flood-control works under the San Joaquin River and tributaries project.

Since 1900 lands in the San Joaquin River Basin have suffered from 40 damaging floods, but the floods of 1937–38, 1950-51, and 1952 are the only ones for which detailed and accurate records of damages are available. The flood damages in 1937–38 were estimated by the Corps of Engineers at $5,340,000, the 1950–51 damages at $9,340,000, and the 1952 damages at $2 million.

Landowners' contribution to flood control

I wish particularly to direct the attention of your honorable committee to the fact that landowners along the Sacramento and San Joaquin Rivers have, through the years, thrown much of their own resources and energy against the common enemy of floods. On the Sacramento River flood-control project, landowners individually have contributed $36,800,000 on levees and miscellaneous flood-control works that were later incorporated into the adopted project. In addition,

landowners have expended an estimated $32,900,000 on flood-control works, portions of which are located on the San Joaquin River and its tribuatry streams. Part of these works will ultimately be incorporated in the authorized San Joaquin River flood-control project.

California legislature's request for funds for San Joaquin River

Evidencing the State legislature's views of the urgent need that exists for construction of these channel improvement works along the San Joaquin River, there is attached herewith Senate Joint Resolution No. 14 adopted by the California Legislature and filed with the California secretary of state on March 12, 1953, chapter 63, Statutes of 1953, which requests Congress to provide the funds necessary for the completion of this work.

In this regard your attention is directed to S. 621 which was introduced in the Senate on January 26, 1953, by Senator Knowland for himself and Senator Kuchel. This bill would authorize the appropriation of an additional $10 million for the prosecution of the plan of improvement approved in the act of December 22, 1944, for the lower San Joaquin River and its tributaries, including the Tuolumne and Stanislaus Rivers. The passage of S. 621 is necessary if the work outlined in the aforementioned Joint Resolution 14 of the California Legislature is to be accomplished.

Cherry Valley Reservoir

Protection from floods is to be effected in the San Joaquin River Basin by the authorized San Joaquin River and tributaries project. Accordingly, the water resources board is requesting funds contingent upon extension of the authorization, in the amount of $2,049,000 for completing the Cherry Valley Reservoir (Tuolumne River) and $800,000 for levee and bank revetment work on lower San Joaquin River.

The Cherry Valley Reservoir is now under construction and should be completed as soon as practicable to perform its part in furnishing flood protection to valley lands by aiding in the regulation of Tuolumne River floods. Any delay in furnishing funds will not only retard the date flood protection will be available, but will add materially to the final cost. Of the $800,000 requested for lower San Joaquin River, $500,000 is for the construction of levees which will be located on both sides of the San Joaquin River between the mouth of the Merced River and the mouth of the Tuolumne River. The levees will constitute a complete unit and will eliminate large flood damages in that section. The $250,000 is for greatly needed bank revetment work on the San Joaquin River near the head of the delta and on certain distributory channels thereto.

Planning funds for New Melones Reservoir

The water resources board is requesting that $100,000 in planning funds be made available for the New Melones Reservoir on Stanislaus River. It will not be practicable to provide full protection from floods on the San Joquin River below the mouth of Stanislaus River until the floodwaters of Stanislaus River are regulated, which regulation is to be afforded by the New Melones Reservoir. Hence, getting started as soon as possible on the planning for this unit is considered imperative.

I wish to make a special plea for the funds requested for the San Joaquin River and tributaries project, and particularly for the planning funds for the New Melones Reservoir. This reservoir will be located on Stanislaus River which enters San Joaquin River at river mile 74.9 some 18.7 miles above Mossdale Bridge. We have a very peculiar situation on the section of the San Joaquin River lying between the mouth of Tuolumne River (mile 83.7) and Mossdale Bridge (mile 56.2). Protection from floods on San Joaquin River is to be supplied under the San Joaquin River and tributaries project (House Committee on Flood Control, Doc. No. 2, 78th Cong., 2d sess.) adopted by the Flood Control Act of December 22, 1944, and consists of regulation of San Joaquin River floods in Friant Reservoir and regulation by areas to be reserved for overflow above the mouth of Merced River; by the regulation of Tuolumne River floods by existing reservoirs and by Cherry Valley Reservoir and eventually entirely by the new Don Pedro Reservoir on Tuolumne River; by regulation of the floods on Stanislaus River by the authorized New Melones Reservoir; and by levees and revetment work along the San Joaquin River below the mouth of Merced and along the lower reaches of the tributaries. Friant Reservoir has been completed and is in operation. Existing reservoirs on Tuolumne are being operated for flood control and furnish quite a high degree of protection and, together with the Cherry Valley

Reservoir when completed, will control all but the very largest floods on Tuolumne River. Accordingly, the water resources board is requesting $550,000 for levees between the mouth of the Merced River (mile 118.2) and Puerto Creek (above mouth of the Tuolumne River) and $250,000 for revetment work near the head of the San Joaquin River Delta. All the work is badly needed and the Reclamation Board heartily endorses it.

The only unit of the San Joaquin River and tributaries project for which no funds have yet been appropriated, is the New Melones Reservoir on Stanislaus River. During the higher floods the virtually uncontrolled flows from Stanislaus River join the San Joaquin River and produce such large flows on the lower Stanislaus River and on the San Joaquin River below the junction that they inevitably burst out, on one side or both of the San Joaquin River between the mouth of Stanislaus River and head of the delta.

In the 1950 flood some 62,400 acres were inundated along the lower Stanislaus River, the San Joaquin River below the mouth of the Stanislaus, and in the San Joaquin Delta causing a flood damage of $5,746,000. In the 1937–38 floods damage in the amount of $4,298,000 occurred in the same areas. In 1952, 9,400 acres were flooded and $750,000 in damages resulted.

As stated above, when there are large flows on the San Joaquin River and its lower tributaries, the floodwaters always break out between the mouth of the Stanislaus River and the head of the delta. The Sacramento district of the Corps of Engineers has studied this situation quite thoroughly, and have found that it is uneconomical to design a practicable levee system through this section until the floods of Stanislaus River are controlled. Accordingly, the water resources board has requested planning funds for the New Melones Reservoir so that it can be built as soon as practicable and the large flood losses on lower Stanislaus River and on the San Joaquin River below the junction of these two rivers may be eliminated. The Reclamation Board most heartily concurs in this request since it considers getting this unit of the project underway a matter of urgency.

Merced County stream group

Another San Joaquin Valley project in which the Reclamation Board has a direct responsibility is the Merced County stream group.

The $540,000 item recommended under this project is for construction of the Bear Creek Reservoir, the last of four foothill reservoirs authorized for this project. Completion of the project is vital for the protection from floods of property on the valley floor in Merced County east of the San Joaquin River, including the city of Merced. The project will not operate properly until this fourth reservoir is constructed. In 1950, flood damages in the amount of $400,000 were suffered in this area.

Other projects important in the overall flood-control program in the San Joaquin Valley are New Hogan, Terminus, and Success Reservoirs.

Planning funds for New Hogan Dam

Planning funds for the New Hogan Dam in the amount of $200,000 are considered essential to be made available to the Corps of Engineers for the authorized New Hogan Dam, construction of which is necessary in the ultimate completion of remedial flood-control measures within the San Joaquin Basin and Delta to augment the units of the San Joaquin River and tributaries project.

Planning Funds for Success and Terminus Reservoirs

The water resources board also is requesting planning funds in the amount of $100,000 each for completing the investigations and designs for Success and Terminus Reservoirs on Tule and Kaweah Rivers, respectively. It is highly desirable that the designs for these two reservoirs be completed as soon as practicable so that their construction may be gotten under way, to the end that the flood damage these two rivers cause along their courses and in Tulare Lake area may be eliminated. These two projects were authorized in 1944.

Conclusions

The imperative necessity for the early completion of the cooperative flood-control program now being carried out by the Federal Government and the State of California in the Sacramento and San Joaquin River Basins of California, is exemplified by the major damage created by the 1950 floods estimated by the Corps of Engineers to have flooded over 350,000 acres situated in these valleys, with the resultant direct flood damage in excess of $30 million, in that 1 year alone.

If funds had been available prior to 1950 and work completed by the Corps of Engineers on approved projects, the losses suffered during the 1950–51 floods on the San Joaquin River alone would have been reduced by $6,541,000, according to their estimates.

Unfortunately for all concerned, floods do not await the balancing of budgest.

SENATE JOINT RESOLUTION No. 14

Adopted in Senate March 3, 1953.
Adopted in Assembly March 11, 1953.

CHAPTER ----------

SENATE JOINT RESOLUTION NO. 14—RELATIVE TO FLOOD-CONTROL WORKS ON THE SAN JOAQUIN RIVER

Whereas the Federal Flood Control Act, approved by Congress December 22, 1944, authorized a plan of improvement for flood control, and other purposes, on the San Joaquin River and its tributaries in accordance with the recommendation of the Chief Engineer in Flood Control Committee Document No. 2, 78th Congress, 2d session; and

Whereas the legislature by section 33 of the State Water Resources Act of 1945 adopted and authorized this plan of improvement; and

Whereas losses from floods during 1937 and 1938 throughout the San Joaquin Basin aggregated more than five million three hundred forty thousand dollars ($5,340,000) and losses from floods during 1950 and 1951 in that area aggregated over nine million three hundred forty thousand dollars ($9,340,000), and since 1900 these lands have suffered 40 damaging floods; and

Whereas the loss due to flood damage increases with the passing of years because of the increased population and the greater centralization of agricultural and industrial growth which are subject to the ravages of the floods; and

Whereas it is essential that the added work be done on the San Joaquin River to prevent to the extent possible further flood damage; and

Whereas the completion and operation of Friant Reservoir makes it feasible to commence construction of the unit of the project comprising channel improvement works along the San Joaquin River between the Merced and Tuolumne Rivers and levee construction from the mouth of the Merced downstream to Puerto Creek near the town of Westley, and the revetment of river banks and levees at critical locations near the head of Sacramento-San Joaquin Delta, requiring the expenditure of approximately eight hundred thousand dollars ($800,000); and

Whereas Federal funds have not been made available for this work; and

Whereas the State water resources board has included in its recommendation to Congress for Federal flood control funds for the 1954 fiscal year, the eight hundred thousand dollars ($800,000) required for the construction of this work, thus recognizing its importance to the welfare and safety of the people of this State: Now, therefore, be it

Resolved by the Senate and Assembly of the State of California, jointly, That Congress is respectfully memorialized to provide the funds necessary to construct the channel improvement works along the San Joaquin River, the levees from the mouth of the Merced River downstream to Puerto Creek, and the revetment of river banks and levees at critical locations near the head of the Sacramento-San Joaquin Delta in accordance with the recommendations of the State water resources board; and be it further

Resolved, That the Secretary of the Senate submit a copy of this resolution to the President of the United States, to the President of the Senate, to the Speaker of the Assembly, and to each Senator and Representative from the State of California in the Congress of the United States, and to the Chief Engineer of the United States Army.

President of the Senate.

Speaker of the Assembly.

Attest:

Secretary of State.

SENATE JOINT RESOLUTION NO. 22

Adopted in Senate April 7, 1953.
Adopted in Assembly April 2, 1953.

CHAPTER ---

SENATE JOINT RESOLUTION NO. 22—RELATIVE TO FLOOD-CONTROL WORKS ON BUTTE AND LITTLE CHICO CREEKS

Whereas the lives and property of the residents of the City of Chico, the town of Durham, and the Durham Land Colony, as well as extensive lands bordering on the upper Butte and Little Chico Creeks in Butte County, are threatened by the ravages of floods; and

Whereas Congress, by the Flood Control Act of December 22, 1944, as amended by the Flood Control Act of May 17, 1950, has authorized remedial flood-control works as a part of a project referred to as "Sacramento River, major and minor tributaries" for construction in cooperation with the State of California, which would afford protection to the people in this area; and

Whereas the California Legislature has, by the State Water Resources Act of 1945, authorized the works contemplated by Congress; and

Whereas Congress has made nine hundred forty-six thousand dollars ($946,000) available to accomplish authorized work on the lower reaches of Butte Creek, which work has been completed; and

Whereas it is estimated that seven hundred thousand dollars ($700,000) of additional Federal funds will be required to complete the authorized works on the upper reaches of Butte Creek and the diversion structure on Little Chico Creek; and

Whereas the Legislature of California has made available all funds necessary to carry out the State's participation in the construction of the works; and

Whereas the additional work contemplated by the congressionally authorized project is necessary if more than minimum protection is to be afforded to the residents in the area concerned; and

Whereas the state water resources board has included in its recommendation to Congress for Federal flood-control funds for the 1954 fiscal year, sufficient funds to complete the flood-control works on the Butte and Little Chico Creeks, thus recognizing its importance to the welfare and safety of the people of this State: Now, therefore, be it

Resolved, by the Senate and Assembly of the State of California, jointly, That Congress is urged to make available the necessary funds to complete the construction of the vitally needed flood-control works on the Butte and Little Chico Creeks; and be it further

Resolved, That the Secretary of the Senate is directed to transmit a copy of this resolution to the President of the United States, the President of the Senate, the Speaker of the House of Representatives, to each Senator and Representative from the State of California in the Congress of the United States, and to the Chief Engineer of the United States Army.

President of the Senate.

Speaker of the Assembly.

Attest:

Secretary of State.

[S. 621, 83d Cong., 1st sess.]

A BILL To authorize additional appropriations for the Lower San Joaquin River project

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in addition to previous authorizations, there is hereby authorized to be appropriated the sum of $10,000,000 for the prosecution of the plan of improvement approved in the Act of December 22, 1944, for the Lower San Joaquin River and tributaries, including the Tuolumne and Stanislaus Rivers, with such modifications thereof as in the discretion of the Chief of Engineers may be advisable.

REQUEST FOR CONSTRUCTION FUNDS

Mr. COHEN. Thank you, sir. My board supports all the items that have been enumerated by Mr. Griffith, chairman of this water-resources board, especially the items affecting the Sacramento District Corps of Engineers. In the interests of time, I will not outline those various things again because they are all in my report, and it would just take up time. Each of them will be discussed by some member of our group.

Inasmuch as I am the only member of the reclamation board from San Joaquin County and parts south, I want to make a special plea to this committee for construction funds for the San Joaquin River levees of $800,000 and for planning funds on New Malones Dam of $100,000. I am a farmer who for the past 23 years has been trying to protect about 20,000 acres of highly developed property surrounded by levees that have been built and maintained by private interests, but we are located in a section downstream where we get the full brunt of the combined flows of the San Joaquin River, the Merced River, the Tuolumne, and the Stanislaus, and they have all joined and bounced down through what we call the Mossdale bottleneck; and in the past 40 years—I mean since 1900—there have been 40 damaging floods caused by those rivers.

ESTIMATED DAMAGE

The Army engineers have estimated that the damage done in 1950 alone was $3¾ million, and in my report there are pictures there that show some of the damage that took place.

We do not need an engineer to tell us that something is wrong with our flood-control system down there, but we have been told, however, by them that the Stanislaus River, which is the one uncontrolled river left, is something that we are going to have to do something about by building New Malones Dam. The Flood Control Act of December 1944 authorized an expenditure of $8 million for the initiation and partial accomplishment of flood-control works on the lower San Joaquin River and its tributaries, and by July 1 of this year that $8 million will have been exhausted with the exception of some $83,755.

AMOUNT REQUESTED

I am now asking this committee—in fact, I am pleading with you—to authorize an appropriation of this balance of $8 million to be used as planning money on New Malones Dam so that eventually we may get that stream stopped. That is all I have.

Senator ELLENDER. Has that project been authorized?

Mr. Cohen. No sir; it is not authorized.

Senator KNOWLAND. The balance of the authorization in excess the budget estimate is about $85,000 that is left?

Mr. COHEN. I think $83,755, in that neighborhood.

Senator KNOWLAND. Your statement will be made a part of the record.

Mr. COHEN. Thank you.

Senator KNOWLAND. I might take time out here to introduce to this group Senator Ellender, of Louisiana, who has come into the room.

Mr. GRIFFITH. I think the record should be corrected, Mr. Chairman.

Mr. COHEN. I am told that the New Malones Dam is part of an authorized project.

Senator ELLENDER. It is?

Mr. COHEN. Yes, sir.

SAN JOAQUIN RIVER, CALIF.

Senator KNOWLAND. Representative Leroy Johnson was unable to be here today and has requested that his statement be made a part of the hearings. That statement will be placed in the record at this point.

(The statement referred to follows:)

STATEMENT OF HON. LEROY JOHNSON, REPRESENTATIVE IN CONGRESS, 11TH DISTRICT OF CALIFORNIA

Mr. Chairman, it is very nice of you to give me this time to make a brief statement to your committee.

I want to point out a situation that I do not believe any other witness has brought to the attention of the committee. Naturally, in the multitude of different situations with which you are confronted, it is utterly impossible for you to understand in detail the physical situations in the areas where money is requested for various kinds of projects.

It is for that reason that I am addressing you concerning the area in my congressional district which comprises the counties of San Joaquin and Stanislaus in California. These two counties are located practically in the center of the great inland valley of California, known as the Central Valley. This valley is drained by two great rivers. The one coming from the north and flowing southward is the Sacramento River. The one coming from the south and flowing northward is the San Joaquin River. These two rivers join west of Stockton, my home city, in an area known as the delta, a low area straddling the lower reaches and mouths of the Sacramento and San Joaquin Rivers. This area comprises, roughly, some 450,000 acres of perhaps the richest soil in the United States. It is composed entirely of peat soil, which, as all of you know, is nonmineral soil.

The area from Stockon south is a very flat area. In fact, at the port of Stockton, which is about 80 miles from the Golden Gate, the altitude is only 12 feet above sea level. Furthermore, from Stockton eastward, the land rises very slowly, until it reaches the foothills of the Sierra Nevada Mountains, about 30 miles away. The valley to the south rises at a very gradual slope.

The San Joaquin River and, likewise, the Sacramento River are fed by streams coming from the Sierra Nevada Mountains. As you know, this is one of the highest ranges in the United States. The snowbank on these mountains is a very deep one. In fact, the entire irrigation of the Central Valley comes in a preponderant part, from the melting snows which feed the various rivers emerging from the Sierra Nevada Mountains and which empty into the San Joaquin River and also into the Sacramento River. From Stockton south, a distance of 75 miles, the elevation does not increase more than 20 feet over what it is at the western side of Stockton. A great part of the San Joaquin River is diked for miles below the city of Stockton, in order that lands may be protected from high water in that stream.

Some of the streams that enter into the San Joaquin River upstream from Lodi (14 miles north of Stockton), are the Mokelumne, the Calaveras, the Stanislaus, the Tuolumne, the Merced, and a number of other streams whose sources are in the foothills of the Sierras. With the flatness of the area on either side of the San Joaquin River, it is quite obvious that, should there be a flood on several of the streams flowing into the San Joaquin, due to rapidly melting snows in the upper reaches of those streams, it would be likely that at some place on the long distance from the lower end of the valley, to the area where the stream enters into the so-called San Joaquin Delta, levees might be broken and floods would follow. This has been the history of the San Joaquin and other streams flowing into it from time immemorial. As early as 1911, a very large flood occurred in the city of Stockton, due to the unprecedented flow of a very small river known as the

Calaveras River. The great flood of 1862, on the same river, is one of those that is pointed out as the great flood of all time on that small stream. Dozens, and undoubtedly, hundreds of floods during historic times have invaded the lands on both sides of the San Joaquin River in various sections from the place where it emerges from the Sierra Nevada mountains and enters the valley along the way down to Stockton and the delta.

From the earliest days the United States engineers have been doing work on the Sacramento River. For many years they have also been doing work along the San Joaquin River. For instance, in 1911 there was a great flood in Stockton. The United States engineers at that time built what is known as the diverting canal which carried the water which was flowing down Mormon Slough, a sort of a tributary of the Calaveras River, and carried the water around the city of Stockton into the Calaveras River. This was done at considerable expense and has proveded a certain amount of flood insurance for the city of Stockton from the Calaveras River. It was done on the basis that the flood in that stream carried so much sedimentation that it would impede the navigability of the San Joaquin River and perhaps of Stockton Channel.

Since 1938, the United States Government has assumed the responsibility for the eradication, or at least the lessening of damage by floods in all parts of the Union. Several devastating floods involving over $10 million of direct damage have occurred in the last 15 years in this general area. In 1937–38 the damage due to floods on the San Joaquin River groups of streams was $5,339,590. In 1950–51, the damage from floods on these streams was $7,500,000. The average annual flood damage on the San Joaquin River watershed was estimated by the United States Army engineers to be $1,460,000.

The above explanation is the situation as it exists in my district with reference to potential floods in the future, and I recommend the following:

That we be given $800,000 for the San Joaquin levees. Part of this would be used in another district, but most of it, I believe, would be spent in my district.

A program to study the Bear Creek situation. This is a flash stream that flows into the San Joaquin River.

One hundred thousand dollars for the New Melones Dam, for study purposes. Later we hope that this dam will be built as a key installation which will greatly minimize the danger in my district of floods from the Stanislaus River, and also from the San Joaquin River.

The raising of the new Hogan Dam. This dam was built by Stockton and paid for with money derived from a bond issue of $1,500,000. With the premium that the bonds obtained, the expenditure of the city was roughly $1,700,000 for this flood-control dam. However, it does not give adequate flood protection, and in the case of a tremendous flood, such as occurred on that river in 1862 and 1911, Stockton could have a very devastating flood. We hope that you will plan on furnishing the funds to make the study, and also the funds to raise the Hogan Flood Control Dam.

That the $83,000 left of funds authorized for the San Joaquin levees be used for the purpose of making further studies of how these levees can be strengthened so as to avoid future floods.

Mr. GRIFFITH. Next we have State Senator Louis G. Sutton.

STATEMENT OF HON. LOUIS G. SUTTON, MAXWELL, CALIF.

BLACK BUTTE DAM

Mr. SUTTON. Mr. Chairman and members of the committee, I will file a brief statement and add some remarks.

I am appearing here in behalf of Black Butte Dam, which was authorized in 1944 for flood control on Stony Creek, which is some 100 miles above the city of Sacramento. This creek floods not only from its own confines, but it adds greatly to the peak of the floods on the Sacramento River. I can exemplify this by saying that the flood from this creek is often 30,000 second-feet or above.

Now the bridge, and you are familiar with Colusa, the bridge at Colusa on the Sacramento River can probably only take 50,000 second-feet, between that and 60,000 second-feet. This one creek can

practically fill the river at the Colusa location some 30 or 40 miles below. In 1950 from the civil-functions fund $100,000 was expended in planning and from a hearing before the State water resuorces board in December it appeared that $100,000 would complete the advance planning and determine the feasibility and place this project in position for construction appropriations.

I earnestly seek those funds from you.

Senator KNOWLAND. Thank you very much. Your statement will be printed in the record.

Mr. SUTTON. Thank you, gentlemen.

(The statement referred to follows:)

STATEMENT OF LOUIS G. SUTTON, STATE SENATOR, CALIFORNIA (TEHAMA, GLENN, AND COLUSA COUNTIES) IN SUPPORT OF AN APPROPRIATION FOR BLACK BUTTE DAM AND RESERVOIR

Honorable Chairman and members of the committee, Black Butte Dam and Reservoir, authorized by the 1944 Flood Control Act, Public Law 534, 78th Congress, 2d session, would be situated 9 miles west of Orland, Glenn County, Calif. (100 miles north of the city of Sacramento), on Stony Creek.

Stony Creek is capable of adding from 30,000 to 50,000 second-feet to the flood crests of the Sacramento River.

During fiscal year 1950, the sum of $95,000 was expended for planning from the Corps of Engineers civil-functions budget. In 1951, an allotment of $7,000 for the same purpose was made by the Chief of Engineers, United States Army.

The California State Water Resources Board has requested funds of Congress since 1949; and are now requesting an appropriation of $100,000 to complete planning the project.

Black Butte Reservoir will control the floods on Stony Creek, and will greatly lessen the pressure on the Sacramento River levee system, since the flood crests of the two streams usually coincide.

The irrigation benefits, covering an area of 15,000 acres, would just about double the present benefits from the two small reservoirs operated as the Orland project since 1916 by the United States Bureau of Reclamation.

Previous estimates have placed the flood and irrigation benefits about equal.

At a hearing in Sacramento during December 1952, the State water resources board developed the fact that $100,000 would complete the preliminary plans. Hence my urgent request for inclusion of this item in the Federal budget for 1953–54.

Mr. GRIFFITH. I call next Fred T. Woell, president, Upper Butte Creek Flood Control Association.

UPPER BUTTE CREEK FLOOD CONTROL ASSOCIATION, CALIFORNIA

STATEMENT OF FRED T. WOELL. PRESIDENT

RESOLUTIONS INTRODUCED

Mr. WOELL. Mr. Chairman and members of the committee, my name is Fred T. Woell, representing the Upper Butte Creek Flood Control Association. I am a farmer residing in the Durham area, and I have already presented a statement, and I would like to augment that; that is, with copies of resolutions, and I would like to include merely the names of the makers of the resolutions.

I will briefly read them. This one is from the Board of supervisors, county of Butte, State of California.

Senator KNOWLAND. Those may be printed. Any official resolutions may be printed in the record at this point.

Mr. WOELL. Just as you wish. I will merely give the caption for the resolution.

Next is the city of Chico, Chico Chamber of Commerce, Chamber of Commerce of Oreville, Associated Chambers of Commerce of Butte County, Durham Businessmen's Association, Durham Junior Women's Club, Durham Unified School District, and we have a document agreement and resolution from the county of Butte, Oreville, Calif. dated January 31, 1949.

I think this caption should be included with the date since the agreement covers maintenance of the project after completion. I will turn that over to the reporter.

Senator KNOWLAND. Yes.

(The resolutions referred to follow:)

RESOLUTION FAVORING LEVEE CONSTRUCTION ON BUTTE CREEK AND DIVERSION IN LITTLE CHICO CREEK, IN THE COUNTY OF BUTTE, STATE OF CALIFORNIA

Whereas an effort is being made to obtain Federal funds to complete the levee construction on Butte Creek and diversion of Little Chico Creek, as authorized by Congress of the United States by Flood Control Act of December 22, 1944, and concurred in by the State Legislature of the State of California by Statutes of 1945, chapter 1514; and

Whereas the board of supervisors of the county of Butte, State of California, feels that said project is for the best interests of the county of Butte: Now, therefore, be it

Resolved by the Board of Supervisors of the county of Butte, State of California, That said board approves the levee construction on Butte Creek and the diversion of Little Chico Creek project as authorized by Congress by Flood Control Act of December 22, 1944, which authorization was concurred in by the Legislature of the State of California by Statutes of 1945, chapter 1514; be it further

Resolved, That a copy of this resolution be forwarded to A. M. Barton, chief engineer and general manager of the Reclamation Board of the State of California, to United States Senators William F. Knowland and Thomas H. Kuchel, and to United States Representative Clair Engle, and to State Senator Paul L. Byrne, and to State Assemblyman Don Hobbie, and to all other officials and individuals interested in the subject matter of this resolution.

The foregoing resolution was introduced by Supervisor Polk, who moved its adoption, seconded by Supervisor Squires, and said resolution was adopted and passed this 26th day of January 1953, on rollcall by the following vote:

Ayes: Supervisors Lobdell, Parker, Polk, Squires, and Chairman Pellicciotti.

Noes: None.

Absent: None.

DAN PELLICCIOTTI,
Chairman, Board of Supervisors of the County of Butte, State of California.

Attest:

W. F. MATTHEWS,
County Clerk and Ex Officio Clerk of the Board of Supervisors.
By G. VINES,
Deputy Clerk.

The foregoing instrument is a correct copy of the original on file and of record in this office.

Attest: April 14, 1953.

W. F. MATTHEWS,
County Clerk and Clerk of the Superior Court and Ex Officio Clerk of the Board of Supervisors in and for the county of Butte, State of California.
By GENEVIEVE VINES,
Deputy.

RESOLUTION FAVORING COMPLETION OF LEVEE CONSTRUCTION ON BUTTE CREEK AND DIVERSION OF LITTLE CHICO CREEK FLOODWATERS INTO BUTTE CREEK IN THE COUNTY OF BUTTE, STATE OF CALIFORNIA

Whereas the Congress of the United States by Flood Control Act of March 1, 1917, authorized the clearing and channel enlargement of Butte Creek and by Flood Control Act of December 22,1944, authorized levee construction on Butte Creek and diversion of Little Chico Creek into Butte Creeek, which action was concurred with by the State Legislature of the State of California by Statutes of 1945, chapter 1514; and

Whereas said Butte Creek project is now even more urgent than when approved due to growth of population and increased value of property at risk; and

Whereas said Butte Creek project has been partially completed at a cost of $946,000 to the United States and $123,082.58 to the State of California, all of which amounts will be substantially wasted if the project is not completed, and all of which is necessary to the safety and prosperity of citizens of the city of Chico and of Butte County: Now, therefore, be it

Resolved by the City Council of the City of Chico, Butte County, Calif., That the council shall urge and recommend the completion of Butte Creek project and request that Federal funds sufficient together with State funds already available to complete said project be made available; be it further

Resolved, That a copy of this resolution be forwarded to A. M. Barton, chief engineer and general manager of the Reclamation Board of the State of California, to United States Senators William F. Knowland and Thomas H. Kuchel, and to United States Representative Clair Engle, and to State Senator Paul L. Byrne, and to State Assemblyman Don Hobbie, and to all other officials and individuals interested in the subject matter of this resolution.

The foregoing resolution was adopted at a meeting of the council of the city of Chico held April 20, 1953, by the following vote:

Ayes: Councilmen Jones, Price, Sigel, Meriam.

Noes: Councilmen—None.

Absent: Councilman Endicott.

THEODORE MERIAM, *Mayor.*

Attest:

GRACE M. STRONG, *City Clerk.*

I, Grace M. Strong, city clerk of the city of Chico, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by the council of the city of Chico at a council meeting held April 20, 1953.

GRACE M. STRONG, *City Clerk.*

CHICO CHAMBER OF COMMERCE,
March 30, 1953.

FRED T. WOELL,
President, Upper Butte Creek Flood Control Association,
Post Office Box 33, Durham, Calif.

DEAR MR. WOELL: At its last regular meeting on Wednesday, March 4, 1953, the board of directors, Chico Chamber of Commerce, went on record unanimously favoring the completion of the flood-control system on upper Butte Creek.

The lower portion of Butte Creek—the area south of Durham—has enjoyed completion and some $1,000,000 has been spent. If the upper portion is not completed, that present investment will be of small value because the floodwaters will run outside the newly completed levees, thereby flooding Durham and the high-valued urban and orchard lands in the area as well as the district known as the Durham State Land Colony which has an irrigation system serving many small ranches of 10 to 30 acres each.

Yours very truly,

ANDREW R. MORRISON, *Manager.*

RESOLUTION

Whereas approximately 5 years ago State and Federal agencies started flood-control work on the tributaries of the Sacramento and San Joaquin Rivers; and

Whereas $946,000 was spent on the lower portion of the Butte Creek project south of Durham where Butte Creek intercepts Highway 99–E dowhstream to the Butte City Road some 12 miles and cleaning and straightening work beyond this point to the Gridley Colusa Road; and

Whereas in 1950 the President of the United States issued an order that due to the emergency, work on all projects not partinent to national defense had to wait; and

Whereas it is estimated that $700,000 of additional Federal funds will be required to complete the authorized works on the upper reaches of Butte Creek and the diversion structure on Little Chico Creek; and

Whereas the California Legislature has made available all funds necessary to complete its portion of the work on Butte and Little Chico Creeks; and

Whereas the additional work contemplated by the authorized project is imperative if flood protection is to be afforded the residents of the city of Chico, the town of Durham, and the Durham Land Colony, as well as extensive lands bordering on the upper Butte and Little Chico Creeks in Butte County: Now ,therefore, be it

Resolved, That the Oroville Chamber of Commerce urge the Congress of the United States to make available the necessary funds to complete the construction of the vitally needed flood-control works on the Butte and Little Chico Creeks; and be it further

Resolved, That copies of this resolution be directed to Hon. William F. Knowland, United States Senator, Hon. Thomas Kuchel, United States Senator, Hon. Clair Engle, Member of Congress, and the Chief Engineer of the Army Corps of Engineers.

LOUIS DEMASSA, *President.*
PATSY O'NEIL, *Secretary.*

Adopted and approved by the Oroville Chamber of Commerce in regular session, March 20, 1953.

ASSOCIATED CHAMBERS OF COMMERCE OF BUTTE COUNTY,
May 6, 1953.

FRED T. WOELL,
President, Upper Butte Creek Flood Control Association,
Post Office Box 33, Durham, Calif.

DEAR MR. WOELL: At its last regular meeting of March 19, 1953, the Associated Chambers of Commerce of Butte County—an organization of six such agencies—went on record unanimously favoring the completion of the flood-control system on upper Butte Creek.

It was felt that the project's completion would prevent the flooding of Durham and the high valued agricultural land in the area thereby benefiting Butte County as a whole.

There can be no question in the minds of qualified people that the money, time, and effort already expended to improve the south portion (lower) will be useless and ineffectual unless similar work is done on the upper portion.

Be assured of the aid and assistance of the association in pushing this vital project to a successful conclusion.

Yours very truly,

ANDREW R. MORRISON,
Secretary, Associated Chambers of Commerce of Butte County.

DURHAM BUSINESS MEN'S ASSOCIATION,
Durham, Calif., March 14, 1953.

MR. FRED T. WOELL,
Upper Butte Creek Flood Control Association,
Post Office Box 33, Durham, Calif.

DEAR SIR: The Durham Business Men's Association, at their meeting on March 13, 1953, in Durham, made and carried the following motion:

"We favor the continuation of the Butte Creek project to its completion. This includes work from the junction of Butte Creek and Highway 99E, in

Butte County, upstream to the foothills and the Little Chico Creek divers bypass."

If this work is not completed the Durham area, including the city of Durham, will be flooded the next time a heavy storm occurs in the mountains on Butte Creek watersheds. The levee overflowed on January 9, 1953, on the west side of Butte Creek, below the bridge on the Durham Oroville Highway, showing the extreme importance of the immediate completion of the Butte Creek project.

We trust that our support will assist you in your work to complete this project.

Yours very truly,

DURHAM BUSINESS MEN'S ASSOCIATION,
C. K. CUTHBERTSON,
W. H. CAIN, *Secretary-Treasurer.*

DURHAM JUNIOR WOMEN'S CLUB,
Durham, Calif., March 27, 1953.

To Butte Creek Flood Control Association

DEAR SIR: In response to your letter of March 16, 1953, recommending Junior Women of Durham, make a resolution, for the completion of flood control of Upper Butte, Creek, we have made that resolution.

Yours truly,

JAYNE CUTHLURTSON,
Correspondence secretary.

DURHAM UNIFIED SCHOOL DISTRICT,
Durham, Calif., May 4, 1953.

FRED T. WOELL,
President, Upper Butte Creek Flood Control Association,
Post Office Box 33, Durham, Calif.

DEAR MR. WOELL: This is to advise you that at the regular meeting of the Board of Trustees of the Durham Unified School District held Wednesday, March 11, 1953 the matter of the possibility of damage by flood water to our buildings due to the choking up of the upper Butte Creek channel was of great concern.

The buildings are valued in excess of $450,000. They are located on one of the old channels of Butte Creek known as the Durham Solugh. The only protection we have is the Butte Creek levee and unless the main channel is cleared and kept open the present levee will be useless.

After considering the fine job done on the lower Butte Creek channel it was pointed out that unless the upper Butte Creek project is completed all the money spent to date will be of little value.

After discussion I was instructed to write to you pointing out the need of the school district for flood protection. You were further urged to use these facts in your effort to get favorable action on the clearing of the upper Butte Creek channel.

Yours truly,

LOUIS EDWARDS,
Secretary, Board of Trustees.

JOURNAL OF BOARD OF SUPERVISORS, COUNTY OF BUTTE, OROVILLE, CALIF., JANUARY 31, 1949, BOOK 35, PAGES 219 AND 220

APPEARANCE

M. C. Polk, county assessor and former member of the Reclamation Board appeared re proposed contract with Reclamation Board on maintenance of levees after construction by the Reclamation Board. In his opinion the levees would be of great value to the county and the benefit derived would fully compensate for the expense of maintenance involved. He made the statement that it would be the best investment the county could make on this kind of a situation.

RESOLUTION AND AGREEMENT

Whereas by act of Congress approved December 22, 1944, in Public Law No. 534, 78th Congress, 2d session, construction by the United States of the flood-control projects for levee work and channel improvement in Chico, Mud, Sandy Gulch, Butte, and Little Chico Creeks, and Cherokee Canal, in Butte County, was approved and authorized as set forth in House Document 473, 78th Congress, 2d session; and

Whereas the State of California, by chapter 1514 of the Statutes of 1945 adopted and authorized said projects for flood control on the above-mentioned streams in Butte County, and authorized acquisition by the Reclamation Board of lands and rights-of-way required for said project at State expense; and

Whereas the State of California, by chapter 142 of the special session of the legislature in 1946, appropriated moneys for payment of necessary State costs in carrying out said projects as adopted by chapter 1514, legislative allocation having been made for work on the foregoing streams, subject to certain assurances and assuming of obligations by local interests as required by Federal and State Statutes; and

Whereas Congress has appropriated funds for the Federal construction of said projects so that the construction thereof will be accomplished without cost to the county of Butte or to any of the area benefited by said works; and

Whereas said project is beneficial to lands and properties in the county of Butte and in protection of loss from floods in the areas adjacent to and downstream from the proposed flood control works on Chico, Mud, Sandy Gulch, Butte, and Little Chico Creeks, and Cherokee Canal: Now, therefore, be it

Resolved, That the county of Butte does hereby assume the obligation of holding and saving the United States free from claims resulting from construction of the works and their subsequent operation and maintenance, and does hereby further assume the obligation of maintaining and operating the completed project works and existing channels, in accordance with regulations prescribed by the Secretary of War and further agree to hold the State of California and the reclamation board harmless from any claims arising out of any of said assumed obligations; and

Resolved, That the chairman of the board of supervisors and the clerk therof be authorized to execute and transmit to the reclamation board the required agreement in the assumption of the obligations outlined above.

The foregoing resolution was introduced by Supervisor Byerly, who moved its adoption, seconded by Supervisor Bille, and adopted on roll call by the following vote:

Ayes: Supervisors Bille, Byerly, Corcoran, Pellicciotti, and Chairman Patty.
Noes: None.
Absent: None.

F. L. PATTY,
Chairman, Board of Supervisors of Butte County.

Attest:

W. F. MATTHEWS,
County Clerk.
By: S. J. CLEWE,
Chief Deputy.

AGREEMENT

This agreement is made between the Reclamation Board of the State of California and the county of Butte on the 31st day of January 1949 in view of the following circumstances:

By act of Congress approved December 22, 1944, in Public Law No. 534, 78th Congress, 2d session, construction by the United States of the flood-control projects for levee work and channel improvement on Chico, Mud, Sandy Gulch, Butte, and Little Chico Creeks, and Cherokee Canal, in Butte County, was approved and authorized as set forth in House Document 473, 78th Congress, 2d session.

The State of California, by chapter 1514 of the Statutes of 1945, adopted and authorized said projects for flood control of the aforesaid streams in Butte County and authorized acquisition by the reclamation board of lands and rights-of-way required for said project at State expense.

The State of California, by chapter 142, Statutes of 1946, Extraordinary Session, has appropriated, and legislative allocation has been made of the money for payment of the costs of acquiring all lands, easements, and rights-of-way necessary for the construction of said projects, requiring, however, as a condition

precedent to the allocation of any State funds to the reclamation board that a local public agency other than the reclamation board has either assumed the obligations of maintenance and holding the United States harmless from damages due to the construction works directly with the United States or has by binding agreement with the reclamation board agreed to assume such obligations and to hold the State and the reclamation board harmless from any claims therefor. Congress has appropriated funds for the Federal construction of said projects so that the construction thereof will be accomplished without cost to the county of Butte or to any of the area benefited by said works; and

The reclamation board upon receiving an allocation of the necessary funds, will give the United States the necessary assurances as to maintenance and holding the United States harmless from damages due to the construction works upon receipt of a binding agreement by the county of Butte that said county will assume said obligations and will hold the State and the reclamation board harmless from any claims therefor.

Said projects are beneficial to lands and properties in the county of Butte as they will result in the protection of such lands and properties from floods in the areas adjacent to and downstream from the proposed flood control works.

It is therefore agreed:

I. The reclamation board upon receiving an allocation of the necessary funds will acquire without cost to the county of Butte all lands, easements, and rights-of-way necessary for the construction of said flood-control projects.

II. The county of Butte does hereby assume the obligations of holding and saving the United States free from claims resulting from construction of the works and their subsequent operation and maintenance and does hereby further assume the obligation of maintaining and operating the completed project works and existing channels, in accordance with regulations prescribed by the Secretary of War, and further agrees to hold the State of California and the reclamation board harmless from any claims arising out of any of said assumed obligations.

In witness whereof, the parties hereto have executed this agreement on the date above mentioned.

THE RECLAMATION BOARD,

By ——— ———,
President.

By ——— ———,
Secretary.

COUNTY OF BUTTE,
By F. L. PATTY,
Chairman, Board of Supervisors.

Attest:

W. F. MATTHEWS,
Clerk.

By S. J. CLEWE,
Chief Deputy.

Mr. WOELL. I would like to have my statement made a part of the record.

Senator KNOWLAND. That will be done.

(The statement referred to follows:)

STATEMENT BY FRED T. WOELL, SPEAKING FOR THE BUTTE CREEK-LITTLE CHICO CREEK PROJECT, THIS PROJECT COMING UNDER THE HEADING OF SACRAMENTO RIVER MAJOR AND MINOR TRIBUTARIES

My name is Fred T. Woell, a citizen of California, and a farmer in the upper Butte Creek area near Durham, Calif. I represent the upper Butte Creek Flood Control Association and speak for the farmers and residents of the Butte Creek and Little Chico area.

The people whom I represent want protection from flood by completion of the Butte Creek-Little Chico Creek project.

The Butte Creek-Little Chico Creek project is an approved job and is over half completed by the Army engineers. Plans are complete and rights-of-way have been obtained for much of the proposed work. Work on this project was stopped because of the Korean situation.

The plans for completion of the project provide for about 9 miles of channel clearance and approximately 18 miles of levee construction, with provision for

diversion of floodwaters of Little Chico Creek into Butte Creek. The Army engineer's plan has the approval of our association and the people of the affected area.

To date the Federal Government, through the Corps of Engineers, has expended about $946,000 on the project. The State of California, through the reclamation board has spent $123,000 for rights-of-way. A total of $1,069,000 is now invested in the project. An estimated expenditure of $700,000 Federal funds and $90,000 of State of California money is necessary to complete the job. Thus the cost of the project will be borne by the Federal Government, the State of California, and the local peoples share will consist of maintenance of the project.

This project is a vital necessity for soil conservation and for the economic protection of many families on small farms and orchards and for the residents of the several communities.

The farmlands in the area consist of a vast acreage of highly developed and diversified agricultural lands. The upper portion consisting of many almond orchards, both large and small acreages, alfalfa plantings, walnuts, row crop, and poultry farms, all under irrigation.

The central and lower area includes almonds, row crop, such as beans, sugar beets and milo grain and livestock farming and the largest rice-producing area of Butte County. In the event of a break in the upper part of Butte Creek this entire area would be flooded.

Included in the area is the town of Durham, with it's unified school system which provides both grammar- and high-school facilities for the area of approximately 400 square miles.

Also subject to severe damage is the Durham State Land Colony, colonized by the State of California in 1918. The colony is made up of many small farms all of which are within the land colony irrigation system.

The Durham community area has a total of 368 farms with cropland totaling 46,150 acres, 6,057 acres of almond orchards and 21,500 acres of grazing land. The Richvale area consists of 53,000 acres of riceland, 418 acres orchard and 5,000 acres grazing land. It is estimated that about half of the area, excluding grazing land is subject to heavy loss by flood from Butte Creek.

Little Chico Creek is a flood threat to the south portion of the city of Chico with a population of 25,000, and to almond orchards and farmlands west of Chico as well as much of the industrial area of the city. The Diamond Match Co. millwork plant, sawmill, and match factory, as well as city and suburban homes and several grammar schools, the Southern Pacific Railway, the Western Pacific Railway and Highway 99E, the main highway in the Sacramento Valley east of the Sacramento River. All highways and railroads are subject to severe damage, and were either washed out or closed during floods in the past.

We in the Durham almond district face the loss of our orchards and ruin in the event of flood, because almonds are highly vulnerable to continued high-water tables and flooding.

The history of Butte Creek is a repetition of levee breaks and floods. We now face greater damage than ever before, because of the development of the past 10 years. Natural drains have been filled in the process of leveling lands. This will cause floodwaters to spread over larger areas than in the past.

The condition of the channel of Butte Creek is worse now than ever before because of being choked with brush and filled with gravel and rock bars which have moved down from higher levels. Last January Butte Creek overflowed, and it was necessary to sound a general alarm for help to sandbag the levee for several hundred feet, and yet the stream carried only half of the water of the recorded flood of 1937.

If the Butte Creek project is not completed we may expect a terrific flood in any year. It could even mean the cutting through of an entirely new channel which would mean the loss of a large amount of our best soil forever.

We have resolutions requesting completion of this project by the Army engineers from the following groups:

Butte County Board of Supervisors
City of Chico
Chico Chamber of Commerce
Oroville Chamber of Commerce
Butte County Associated Chambers of Commerce
Durham Business Men's Association
Durham Junior Woman's Club
Durham Unified School District, Board of Education

In behalf of the people whom I represent throughout the entire area in the Butte Creek-Little Chico flood area, I ask that this project be included for immediate completion and that necessary Federal funds be provided for the Government's share of the cost, so that the money already invested in the project will be protected and so that the land will be saved for the present owners as well as for future generations.

Thank you gentlemen for your attention.

PROJECT DESCRIPTION

Mr. WOELL. I would like to offer a few remarks in connection with the project. The project is now half complete. It consists of levee work on Butte Creek and Little Chico Creek. Butte Creek is a drainage stream and also an irrigation stream coming down from the Sierras and the Little Chico project carries through the city of Chico. Half of it was completed in 1950 and came to an end because of the Korean situation. We feel now—and I am here to request an authorization for sufficient funds to complete the project, which would be approximately $700,000 of Federal funds and $90,000 of State funds, and in addition to that the county has agreed to take care of future maintenance, which is of some considerable importance because of conditions there.

The feasibility of the project so far was due entirely to the diversion of Little Chico Creek. We have a flood condition there that arises from low level watersheds and the engineers have discovered that they could divert that into Butte Creek and get the water out of the way, and then be still in position to handle the floodwaters that we have had.

EXTENT OF DAMAGE

Butte Creek has been a hazard for many years, and it is doing a lot of damage, and we have an area there of 100,000 acres, consisting of about 40,000 cropland acres, which is our best cropland in the northern part of the Sacramento Valley. In addition there are 6,000 acres of almond land, which consists of many holders of 10, 20, and 30 acres, and if these men are flooded out they would be definitely wiped out economically.

Another economic feature for the Chico Creek is protection for the industrial area of the city of Chico and for orchards and farming districts near the town.

I earnestly ask the committee's consideration for this project, and if this project is included in the Sacramento minor tributaries, in other words, $1,868,000. Gentlemen, I thank you.

Senator KNOWLAND. Thank you.

FOLSOM DAM, SACRAMENTO RIVER AND BLACK BUTTE DAM

Senator KNOWLAND. Representative John E. Moss, Jr., was unable to be here today. He has requested that his statement be made a part of the hearings. His statement will be placed in the record at this point.

(The statement referred to follows:)

STATEMENT OF HON. JOHN E. MOSS, JR., REPRESENTATIVE IN CONGRESS FROM THE THIRD DISTRICT OF CALIFORNIA

I wish to give the strongest possible support to the requests for Federal funds to continue the important flood-control work in California. Projects in which I am particularly interested include completion of Folsom Dam, flood-control work on the Sacramento River and its tributaries and completion of planning for the Black Butte Dam and Reservoir.

The Nation, the State of California, and the people of my congressional district have an important investment in Folsom Dam now under construction by the Army engineers. I wish to urge a fully adequate appropriation to continue work on the project and keep the construction schedule up to date. Construction has been delayed by the discovery of a fault in the dam foundation, but appropriations should not be reduced if it will mean further delays in work on this important project.

The Sacramento River flood-control project is the oldest project of its kind in the Nation, but dragging out the flood-control work in the area by small appropriations will merely add to the age of the project, not to its benefits. Early completion of the levees and other flood-control works will, in addition to providing necessary protection from high waters, mean a saving in Federal expenditures. As soon as the project is completed and turned over to local irrigation and reclamation districts, Federal expenditures of $600,000 a year to operate and maintain the flood-control works will no longer be necessary. The local districts will take over the maintenance costs now borne by the Federal Government. Early completion of the project, thus, is just good business for the Federal Government.

Another bit of good business which the Federal Government should practice is the allocation of the small sum of $100,000 to complete the planning for Black Butte Dam and Reservoir. This is good business because some $100,000 already has been spent investigating the project and this money will be wasted unless the investigation is completed. The dam and reservoir will give effective control of Stony Creek which adds up to 50,000 feet of water per second to the flood crests of the Sacramento River. Not only will control of Stony Creek lessen the pressure on the Sacramento River levees, but it also will permit irrigation of 15,000 acres of farmland needed to produce food for the Nation.

This project was authorized in 1944 and funds to complete the investigation have been requested by the California State Water Resources Board since 1949. Those funds should be allocated now or the money already spent will have been wasted.

I would like to add that requests for Federal aid for flood-control works in California are not based on whim or caprice. Representatives of local areas where flood-control work is needed get together each year to consider the amount of money needed to continue the work. Each of these requests is screened carefully by the water resources board and the resulting combined request of the State of California includes only amounts felt to be absolutely necessary. California contributes an important part to the economy of the Nation, but California flood-control problems have not received the consideration they deserve. This committee can grant that consideration by approving the flood-control allocation requested by California representatives.

Mr. GRIFFITH. Next we have John M. Luther, manager, California Central Valleys Flood Control Association.

CALIFORNIA CENTRAL VALLEYS FLOOD CONTROL ASSOCIATION

STATEMENT OF JOHN M. LUTHER, MANAGER

SACRAMENTO VALLEY PROJECTS

Mr. LUTHER. Senator Knowland and members of the committee, my name is John M. Luther, and I represent the California Central Valleys Flood Control Association, which is an organization of the reclamation and other organized farming districts in the Sacramento Valley. I am filing a statement on behalf of all of the projects from the Sacramento Valley, and in that statement the detail in connection with them is covered.

Senator KNOWLAND. Your statement will be made a part of the record, and will follow your remarks.

PROJECT DESCRIPTION

Mr. LUTHER. At this time I would like simply to briefly outline two of those projects. Both are authorized projects, one of them being in the budget and the other not included in the coming bill. The first is the Sacramento River project, which is the oldest California flood-control project. It is a project similar to the flood-control projects in the Southern States. It is a stream which meanders and below Sacramento has practically reached sea level and runs for about 75 miles in large loops in a delta area.

Senator, I think you will recall 2 years ago your assistance in getting the estimate on that project revised and the entire job reviewed by the Corps of Engineers and the State agencies. Very happily for us, at least that has been accomplished, and we would like to thank you for it..

ESTIMATED AMOUNT NEEDED FOR COMPLETION

The current estimate to complete is in the neighborhood of $18 million, and the State has ample funds set aside to meet its commitments.

Our estimate of State and local costs is $15 million or nearly equal to the Federal estimate.

Senator ELLENDER. I note this project was authorized in 1917 and is not yet completed?

Mr. LUTHER. That is correct. It was originally authorized, Senator, as a rivers-and-harbors project in 1910.

Senator ELLENDER. To what extent has the work that you have already done been of help?

Mr. LUTHER. It has been of great help. For instance, our last major flood in the valley was in 1950, and the estimate is that with the works completed at that time damages in the neighborhood of $75 million were prevented. I think those figures were developed by the Corps of Engineers. The project is about 75 or 80 percent completed.

Senator ELLENDER. I thought we had one behind time. We had one authorized in 1928, and it is about 60 percent complete. Yours is about 70 percent complete?

Mr. LUTHER. Right. For a number of years we were doing the same thing that you have been doing in Los Angeles, we were spending about $1 million and actually going backward with respect to the project.

Senator KNOWLAND. Senator Ellender is very sympathetic with this flood-control project since he lives down in the lower Mississippi where everybody else dumps their water down on them.

Senator ELLENDER. I know all about that. If it were left to me I would vote the whole amount. That is how sympathetic I am.

AMOUNT REQUESTED

Mr. LUTHER. We are asking a slightly increased amount over the budget item, but we hope that the $4 million for 1954 will do it.

SACRAMENTO MAJOR AND MINOR TRIBUTARIES PROJECT

The other project is a modification of that project which was enacted in 1944, and on which Mr. Woell testified covering one phase of it; that is, what we call the Sacramento major and minor tributaries project. The estimated cost of the project is roughly $30 million, and there has been appropriated to date, I think, in the neighborhood of $2 million. Last year there was nothing in the budget for the project, so that works which had been started were brought to a halt.

Senator ELLENDER. Was that because it was in the nature of a new start?

Mr. LUTHER. No, sir; I do not know what the view back here was, but the fact is that one part of that project was about half completed, and the money available completed that portion of it, and the remaining portion, which is the part of Butte Creek Mr. Woell testified on, remains to be done. That is what we are trying to get in the budget at this time.

Mr. Chairman, that completes my statement. I will give the clerk my prepared statement.

Senator KNOWLAND. Thank you very much.

Mr. LUTHER. Thank you, gentlemen.

(The statement referred to follows:)

STATEMENT BY JOHN M. LUTHER, MANAGER OF THE CALIFORNIA CENTRAL VALLEYS FLOOD CONTROL ASSOCIATION

The California Central Valleys Flood Control Association, of which I am manager, has for many years been engaged in the advancement of flood-control projects for the protection of the many communities and the extensive and highly developed agricultural lands of the Sacramento Valley.

The association membership is composed of nearly all valley counties lying between Shasta Dam and the delta region; some 40 reclamation, drainage, and levee districts; and individual landowners concerned with protection of their holdings from floodwaters, which in some areas of the valley continue to be an annual occurrence.

Recommendations of the Central Valley Flood Control Association, presented herewith, have been carefully considered and are fully endorsed by the association membership, its executive committee, and officers.

Our recommendations closely parallel those presented by the California State Water Resources Board; and in presenting our recommendations, therefore, we stand in support of those presented by the water-resources board.

The association recommendations, however, are confined to flood-control projects situated in the confines of the Sacramento Valley and delta. The projects on which I am prepared to present the association's viewpoint and policies include the Old Sacramento River project; the extension of that project to include major and minor tributaries of the Sacramento River; Black Butte Dam; and Folsom Dam.

SACRAMENTO RIVER FLOOD-CONTROL PROJECT

The Sacramento River project was authorized as a Federal flood-control project in 1917. In 1944 standards of design were raised to meet the need for additional flood flows, a need made evident by the disastrous flood conditions which prevailed in 1937 and 1942.

At the present time the project has a total Federal cost estimated at $61,535,000, toward which the Federal Government has contributed $43,811,500 to date. The Federal cost, to complete, therefore approximates $17,723,000.

For 3 years prior to fiscal year 1953–54, however, Federal appropriations for this project have been limited to approximately $1 million annually, pending completion of studies to determine reliable cost figures for completion of the works to approved standards of construction; and a definition of the respective responsibilities of Federal, State, and local governments as to completion, operation, and maintenance of project works.

The reexamination of the Sacramento River flood-control project was completed late in 1951, and subsequently recommendations and conclusions embodied in the report were incorporated in a memorandum of understanding developed by representatives of the United States Army Corps of Engineers, the Reclamation Board of the State of California, and the Department of Public Works of the State of California.

Acceptance of this memorandum of understanding by the Federal and State agencies concerned provides a sound basis for completion of the project as rapidly as the necessary funds can be provided.

Federal responsibility for maintenance of project units ceases when the units are completed and are taken over by the State government. Maintenance costs during the last several years have averaged between $500,000 and $600,000 annually. It is quite apparent, therefore, that the Federal Government can effect a substantial reduction of annual maintenance costs by expediting completion of the project, so that responsibility for maintenance can be assumed by the State of California.

The Central Valleys Flood Control Association supports the recommendation for an appropriation of $5 million for this project during the fiscal year 1953. Appropriation of this amount would permit construction of a new levee along the west bank of the Feather River, east of the town of Gridley, protecting that community as well as an extensive agricultural area from flood damage. It would also enable reconstruction of the presently authorized American River levees and would permit major repairs at various locations on Sacramento River levees.

It is my understanding that the pending Federal budget originally included an item of $4,900,000 for the Sacramento River project, closely approximating the amount recommended by the State water-resources board and by our association, but that this item has been reduced to $4 million.

In view of the limited amount of construction on this project during the last 4 years, and the urgency of the units proposed for construction next fiscal year, it is believed that restoration of this item to at least the amount originally budgeted would be consistent with sound fiscal policy.

SACRAMENTO RIVER MAJOR AND MINOR TRIBUTARIES

The Flood Control Acts of 1944 and 1950 authorized the extension of the Sacramento River project to include construction of levees and channel-improvement works for flood control on nine streams tributary to the Sacramento River. Also included were the construction of two multipurpose dams on the Sacramento River and tributaries, and reclamation works in Butte Basin.

The current Federal budget makes no provision for any of these projects. Total estimated Federal cost of works other than the reservoirs is placed at $30,750,000.

For the most necessary projects on major and minor tributaries of the Sacramento River, the Central Valleys Flood Control Association requests an appropriation of $1,868,000 for fiscal year 1953. These funds are needed for completion of work on Butte Creek and Little Chico Creek estimated at $643,000; Mud Creek and Sandy Gulch projects at an estimated cost of $450,000; and start of levee construction and channel improvement on Cherokee Canal at an estimated cost of $775,000.

Completion of these projects is of vital importance to areas of high agricultural production where, nearly every winter, local flooding occurs. These floods, in years of heavy rainfall, cause extensive crop damage. Little or no relief can be expected in these areas until these projects are completed.

BLACK BUTTE DAM AND RESERVOIR

Black Butte Reservoir on Stony Creek, to be created by construction of an earth-fill dam, was authorized by the Flood Control Acts of 1944 and 1950. To date, $101,300 has been appropriated toward an estimated total cost of $13,910,000.

The reservoir has a planned capacity of 160,000 acre-feet, of which 130,000 acre-feet would be dedicated to protection of the city of Orland and surrounding agricultural lands which, in past years, have suffered extensive damage from Stony Creek floodwaters.

The reservoir would also assist in reducing damage caused by flood flows in the Sacramento River and Butte Basin, near the junction of Stony Creek with the

Sacramento River. In addition, the reservoir would provide some 60,000 acre-feet annually for irrigation.

Plans for construction of Black Butte Reservoir are not sufficiently advanced to justify a request for construction funds, but the Flood Control Association supports a request for an appropriation of $100,000 for fiscal year 1953 in order to advance project planning to the point where this project can be included in the construction category for the following fiscal year.

FOLSOM DAM AND RESERVOIR

Construction of Folsom Dam, a major flood-control and water-conservation project on the American River, was authorized in the Flood Control Act of 1944. Federal construction cost, to complete, is currently estimated at $58,560,000, of which $32,869,000 has been appropriated by Congress.

This is a multiple-purpose project which will provide flood protection for the city of Sacramento and for large agricultural areas adjacent to the American River. It will store approximately 1 million acre-feet of water for irrigation and domestic purposes and for generation of electric power.

It is essential that sufficient funds be provided during fiscal year 1953 to so that construction of this project can continue without interruption. This amount was established at $15 million by our association, but in view of construction difficulties encountered last winter it is possible that the lesser budgeted amount will suffice, since it appears that there will be a carryover of unexpenced funds.

CONCLUSION

In preparing its recommendations for Sacramento Valley flood-control projects for fiscal year 1953, the California Central Valleys Flood Control Association took cognizance of the announced policy of Congress to reduce Federal expenditures. The association, therefore, has excluded projects which can be deferred with reasonable safety. Projects which have been included for appropriations are deemed essential to the safety of Sacramento Valley communities and necessary for prevention of crop losses. Those requests which have been included have been held to the minimum amounts consistent with satisfactory progress.

Mr. GRIFFITH. Next we have Mr. Charles W. Deterding, county manager of Sacramento County.

SACRAMENTO COUNTY, CALIFORNIA

STATEMENT OF CHARLES W. DETERDING, COUNTY MANAGER

AMOUNT REQUESTED

Mr. DETERDING. Senator Knowland, gentlemen of the committee, my name is Charles W. Deterding; I am county executive of Sacramento County, Calif.

I have been instructed by the board of supervisors to appear before your committee and request an appropriation of $9,800,000 to vigorously continue construction on the Folsom Dam for the fiscal year 1954. In support of this request, I herewith offer for the record a resolution from the Board of Supervisors of Sacramento County, a resolution from the Board of Supervisors of El Dorado County, and a resolution from the Board of Supervisors of Placer County.

Senator KNOWLAND. They may go into the record at this point with your statement.

(The statement and resolutions referred to follow.)

RESOLUTION No. 11,772

Whereas the Federal Government is now constructing a dam at Folsom on the American River in the County of Sacramento, State of California; and

Whereas the Folsom Dam is approximately 50 percent complete; and

Whereas the Folsom Dam is vitally needed to protect Sacramento from the possibility of floods; and

Whereas the local interests and landowners are anxious to obtain water from the Folsom Reservoir: Now, therefore, be it

Resolved, That the Board of Supervisors of the County of Sacramento, State of California, hereby respectfully memorialize the House and Senate Subcommittees on Appropriations for Civil Functions to provide sufficient funds to vigorously continue construction on the Folsom Dam; and be it further

Resolved and ordered, That Mr. Charles W. Deterding, county executive of Sacramento County, be authorized and requested to personally appear before the committee to present data in support of continuing construction of the Folsom Dam.

Passed and adopted by the Board of Supervisors of the County of Sacramento, State of California, this 6th day of May 1953, by the following vote, to wit:

Ayes: Supervisors Bonetti, Elmer, Hoffman, Kelley, Garlick.
Noes: None.
Absent: None.

[SEAL] JAMES R. GARLICK,
Chairman of the Board of Supervisors of Sacramento County, Calif.

Attest:

C. C. LARUE, *County Clerk.*
By WM. H. DICK, *Deputy.*

RESOLUTION

Whereas it has come to the attention of this Board of Supervisors of the County of Placer, State of California, that Charles W. Deterding, Jr., county manager of the county of Sacramento, State of California, has been authorized and instructed to confer with responsible Federal Government authorities in Washington, D. C. for and on behalf of the said county of Sacramento, with the objective in view, of obtaining additional appropriations to expedite the completion of the Folsom Dam and Reservoir project; and

Whereas this board has been requested to consider the matter to have said Charles W. Deterding, Jr., authorized and empowered to likewise act for and represent the county of Placer in connection with his said mission, without cost or expense to the county of Placer: Now, therefore, be it

Resolved, and it is hereby resolved, That the said Charles W. Deterding, Jr., county manager of the county of Sacramento, be and he is hereby authorized and empowered to act for and represent the county of Placer in conjunction with the county of Sacramento for the aforesaid purpose of conferring with responsible Federal authorities in Washington D. C., with the objective of obtaining additional appropriations to expedite the completion of the Folsom Dam and Reservoir project.

The foregoing resolution was duly passed by the Board of Supervisors of the County of Placer at a regular meeting thereof on the 27th day of April 1953, by the following vote on rollcall:

Ayes: Supervisors Paolini, Boyington, Waddle, Anderson, Paoli.
Noes: None.
Absent: None.
Signed and approved by me after its passage this 27th day of April 1953.

FRANK J. PAOLI,
Chairman of the Board of Supervisors.

Attest:

L. RECHENMACHER,
Clerk of said Board.
By OLGA CLOUD, *Deputy Clerk.*

RESOLUTION

Whereas it has come to the attention of the Board of Supervisors of the County of El Dorado, State of California, that Charles W. Deterding, Jr., county executive of the county of Sacramento, State of California, has been authorized and instructed to confer with responsible Federal Government authorities in Washington, D. C., for and on behalf of said county of Sacramento, with the objective of obtaining additional appropriations to expedite the completion of the Folsom Dam and Reservoir project; and

Whereas this board has been requested that the said Charles W. Deterding, Jr., be authorized and empowered to likewise act for and represent the county of El Dorado in connection with said mission, without cost or expense to the county of El Dorado: Now, therefore, be it

Resolved, and it is hereby resolved, That the said Charles W. Deterding, Jr., be and he is hereby authorized and empowered to act for and represent the county of El Dorado in conjunction with the county of Sacramento for the express purpose aforesaid of conferring with responsible Federal Government authorities in Washington, D. C., with the objective of obtaining additional appropriations to expedite the completion of the Folsom Dam and Reservoir project.

Passed and adopted by the Board of Supervisors of the County of El Dorado, State of California, this 27th day of April 1953, by the following vote, towit:

Ayes: Supervisors Andrew G. Robertson, Eugene A. Chappie, Cyril H. Heusner, George H. Klare, and John A. Winkelman.

Noes: None.

Absent: None.

ANDREW G. ROBERTSON,

Chairman of the Board of Supervisors of the County of El Dorado, State of California.

Attest:

V. H. BENSON,

County Clerk and ex Officio Clerk of the Board of Supervisors of the County of El Dorado, State of California.

By EVELYN E. LUMLEY,
Deputy.

Mr. Chairman and gentlemen of the committee, my name is Charles W. Deterding. I am county executive of the county of Sacramento, Calif. The board of supervisors has instructed me to appear before your committee and urge approval of the appropriation as set out in the executive budget to continue construction on the Folsom Dam project in the next fiscal year.

Sacramento County is vitally interested in the Folsom Dam project. For over 10 years, I have personally represented the county at hearings supporting Federal approval and later in obtaining appropriations for the Folsom Dam.

This interest in the Folsom Dam project stems from our inherent fear of floods from the American River. Sacramento is located at the confluence of the American River with the Sacramento River. There is always the possibility of the two rivers cresting at the same time. The result of such a coincidence of the flood-stage conditions would be to force the water in the American River to a very high stage. This could endanger the Sacramento levee system.

Every river ar some time in its history develops a flood of far greater proportions than has ever been recorded. In an analytical analysis of the runoff of the American River watershed, there is every indication that the synchronizing of certain meteorological, hydrological, and topographical conditions would produce a flood of much greater volume than we have heretofore known.

During November and December 1950, widespread damage was sustained in the vicinity of Sacramento as the result of floodwater from the American River. At its crest, the river was discharging 210,000 cubic feet per second on its lower reaches, causing flood damages estimated at about $3 million.

With the completion of Folsom Dam the river would be controlled to discharge 115,000 cubic feet per second. Not only would this relieve the pressure on the levee systems of Sacramento, but it would add to the safety and protection of the transcontinental rail and highway systems which converge at Sacramento.

These major highway and railway lines are also of vital concern to the three military establishments in the vicinity of Sacramento. The early completion of the Folsom Dam, therefore, has Federal significance and is important as a standby for the assurance that these transportation lines will always be in service.

The completion of the Folsom Dam project should be accomplished as soon as practicable in order that downstream areas, including the city of Sacramento and the surrounding district, may be afforded adequate protection against floods.

Until the Folsom Reservoir is in operation for flood control, the flood protection afforded by existing facilities cannot be considered adequate flood protection for a city of the size and importance of Sacramento.

In previous appearances before this committee, I have gone into extensive detail of the probabilities of floods in the Sacramento area. That is not necessary

today, for I am sure that you are very familiar with all phases of our flood problems.

In submitting our need for the Folsom Dam project, I have always tried to present factual data that would substantiate the economic justification for constructing the dam.

I have informed you that there was an immediate market for all the water that would be stored in the reservoir. That the local interests would fulfill their obligation of putting themselves in a position to make use of all the services that the dam would provide.

In the local service area, because of the extensive expansion of the agricultural development, increased pumping is lowering the ground water level to where it is no longer economically justifiable to irrigate with such expensive water.

With the American River being close at hand and the Folsom project now under construction, it was natural that the land owners should look with favor on this undertaking and agree to assume their just and rightful responsibilities in making the project economically sound.

In conformity with the adoption of this policy, the county of Sacramento with and by a vote of approval by the land owners representing 110,000 acres of land, has organized local irrigation districts under California law.

These districts have obligated themselves to build canals and other irrigation facilities to bring water to their lands. Engineering surveys and some construction is actually in progress at the present time.

These districts are vigorously prosecuting the work with the understanding that water would be delivered to them early in 1955.

Other areas are in the process of investigating the formation of water districts to use American River water in Sacramento County. In some of the adjoining counties, additional studies and investigations are also being made.

The county of Sacramento, desiring to see this development proceed with all rapidity and in conformity with the wishes of the Federal representatives and our assurance to the committee of Congress that the county of Sacramento would do everything within its power to promote the economic success of the project, has proceeded to set up under California law what is known as the Sacramento County Water Agency.

In brief this puts the county in the water business. It was the desire of the Bureau of Reclamation that they did not wish to deal with a multiplicity of individual water users or a number of water districts. Therefore, the only practical means of using Folsom water seem to be for the county of Sacramento to assume leadership and responsibility of purchasing water directly from the Folsom project and in turn resell this water to our local landowners and water districts.

In all my presentations to committees of Congress, I have given them my assurance that Sacramento County and the local landowners would justify their confidence in approving and appropriating funds for the construction of the dam on the American River at Folsom.

By creating an overall countywide water district to handle through one transaction with the Federal Government all of the water to be used in Sacramento County, by the organization of our local landowners into legal irrigation districts under State law, by our local interests assuming financial responsibility to provide their own water-distribution facilities by being in a position to receive water in the early part of 1955, the citizens of Sacramento County feel that they have fulfilled their promise and justified the confidence you have placed in them by creating a need for the services of the Folsom Dam project.

On the basis of the seriousness of our flood problem and the early need for water for our farmlands, I feel sure that you realize our desire to have the Folsom Dam completed as soon as possible.

Not only is Sacramento County vitally interested in the Folsom project, but the adjoining counties of El Dorado and Placer have joined with Sacramento in a Tricounty organization to promote and to construct roads, bridges, and recreational facilities that are a responsibility of the local county governments. These three counties have assessed themselves and agreed to continue to raise by taxation the necessary funds to carry out their obligation to the Congress and to do locally those things that are a responsibility of local communities.

Here again not only Sacramento County, but three counties have legally, officially, and financially assumed their responsibilities in the Folsom project. They expect to have their facilities completed in the spring of 1955.

It will be disappointing, to say the least, to the local interests if for any reason the vigorous prosecution of the work of constructing the Folsom Dam is not continued or is allowed to slacken.

Like most of California, Sacramento, Placer, and El Dorado Counties are experiencing a very rapid increase in population. To meet the many demands of our rapidly expanding agricultural development, it is imperative that additional water must be made available at an early date.

This is going to be a dry year in California; the shortage of rainfall will seriously reduce our agricultural output. The need for stored water will then be very apparent. Because of the drought throughout the State, widespread interest will be directed toward the early completion of the Folsom Dam.

Therefore, I want to call to the attention of the committee that the rapid construction of the Folsom Dam is not only of concern to the Counties of Placer, El Dorado, and Sacramento but the citizens of many counties in the interior valley of California are watching with deep interest and concern the progress of construction on the Folsom Dam.

The building of a project of the magnitude of the Folsom Dam, with all of its various ramifications, is a major engineering undertaking.

Because of the number of contractors and the extent of the work, it is imperative that all the operations be well planned and coordinated so that the most efficient program of construction can be carried out.

I consider the contract price very low. That the contractors may successfully complete their contract, it is necessary that schedules of operation and performance be set up in conformity with well thoughtout engineering and construction practices.

In constructing a dam across a stream such as the American River, considerable thought must be given to interference with the construction program as the result of floods. While this was not a year of excessive floods on the American River, nevertheless, they were of sufficient volume to cause considerable interference with the foundation work and the construction on the lower levels of the dam. Considerable time was lost as a result.

Then again some unlooked for foundation conditions were uncovered. This too caused some delay.

However, much of the delays were anticipated by the contractors; and as a result the work will not be too far behind schedule by late summer.

The time table of performance on such a construction project as the Folsom Dam must consider the work as a whole; and while there has been some loss of time on the main portion of the dam in the river channel, work has been progressing vigorously throughout the winter on all portions immediately adjacent to the main structure.

The following will indicate the progress of construction up to the present time.

It is estimated that the acquisition of real estate for the project is about 65 percent complete. The diversion tunnel is complete and is being used during the low water season to divert the river flow from the construction area. The Morman Island auxiliary dam is better than 95 percent complete. Five of the eight dikes have been completed. Procurement of gates and operating equipment is approximately 45 percent completed. Construction on the main dam is about 30 percent complete. It is estimated that by June 30, 1953, the project as a whole will be about 50 percent complete.

Most of the work of constructing the Folsom Dam is now covered by contracts. The remaining contracts to be executed consist of clearing of the higher portions of the reservoir area, grouting and drainage work on the main concrete dam, and the earth fill.

The appropriation for the fiscal year 1954 will be utilized to complete real-estate acquisition, to continue construction on the main dam, and to accomplish the remaining grouting and drainage work on the earth fills and concrete dam.

The total funds appropriated to date for the construction of the Folsom Dam are $32,869,000.

With this large investment now in the project and the dam being approximately one-half completed, it seems that sound financing would indicate completion of the project at the earliest possible date.

With the need for flood control becoming more acute every day, with the landowners and local interests putting themselves in a position to use the water that will be conserved in the reservoir, with the widespread interest in the project throughout central California, it is the desire of the citizens of El Dorado, Placer, and Sacramento Counties, in particular, that ample funds be appropriated for the fiscal year 1954 to continue construction on the Folsom Dam with all speed possible.

I would like to express to the committee my sincere appreciation for the courtesies you have extended to me on behalf of the people of the counties I represent and your consideration of the Folsom project.

Thank you for the privilege and opportunity of presenting the Folsom project to you.

FOLSOM DAM CONSTRUCTION

Mr. DETERDING. The timetable of performance on such a construction project as the Folsom Dam must consider the work as a whole, and while there has been some loss of time on the main portion of the dam the river channel work has been progressing vigorously throughout the winter on all portions immediately adjacent to the main structure. The following will indicate the progress of construction up to the present time. It is estimated that the acquisition of real estate for the project is about 65 percent complete. The diversion tunnel is complete and is being used during the low-water season to divert the river flow from the construction area.

MORMON ISLAND AUXILIARY DAM

The Mormon Island auxiliary dam is better than 95 percent complete. Five of the eight dikes have been completed. Procurement of gates and operating equipment is approximately 45 percent completed. Construction of the main dam is about 30 percent completed. It is estimated by June 30, 1953, the project as a whole will be about 50 percent complete. Most of the work of constructing the dam is now covered by contracts.

UTILIZATION OF 1954 APPROPRIATION

The appropriation for the fiscal year 1954 will be utilized to complete real-estate acquisition, to continue construction on the main dam, and to accomplish the remaining grouting and drainage work on the earth fills and concrete dam. The total funds appropriated to date for construction of the Folsom Dam are $32,869,000. With this large investment now in the project and the dam being approximately one-half completed, it seems that sound financing would indicate completion of the project at the earliest possible date. With the need for flood control becoming more acute every day with the landowners and local interests putting themselves in a position to use the water that will be conserved in the reservoir and with the widespread interest in the project throughout central California, it is the desire of the citizens of El Dorado, Placer, and Sacramento Counties particularly, that ample funds be appropriated for the fiscal year 1954 to continue construction on the Folsom Dam with all speed possible.

I would like to express to the committee my sincere appreciation for the courtesies you have extended to me on behalf of the counties and the people I represent, and your consideration of the Folsom Dam. Thank you for the privilege and opportunity of presenting this to you.

Senator KNOWLAND. Thank you very much.

Mr. DETERDING. Thank you, gentlemen.

CHERRY VALLEY PROJECT

Senator KNOWLAND. We might bring up next the Cherry Valley project. Congressman Mailliard, of San Francisco, is here. Under the general rules of the committee I would like to extend courtesies to the Members of the other body who come over here and have

problems of their own in the House. I do not know whether he will be able to stay throughout the entire hearings, but if you have any statement to make, Congressman, or want later to supplement anything you may say by written statement, it can be placed in the record.

STATEMENT OF HON. WILLIAM S. MAILLIARD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

SUPPORT OF PROJECT

Representative MAILLIARD. Thank you, Senator Knowland and gentlemen. There are two official representatives of the city of San Francisco here to testify for Cherry Valley project, Mr. Francis Keesling and Mr. Lloyd. It was just my desire to come and express my interest. This is very important to our city because we get our domestic water supply from this project, and I merely wanted the record to show that I appeared in support of their testimony. I do have another engagement on the other side, so I do appreciate your courtesy.

Senator KNOWLAND. We appreciate your coming here and are always glad to see you.

Representative MAILLIARD. Thank you.

Mr. GRIFFITH. I will call on Mr. Harry E. Lloyd, manager and chief engineer of the Hetch Hetchy water supply.

HETCH HETCHY WATER SUPPLY, CALIFORNIA

STATEMENT OF HARRY E. LLOYD, MANAGER AND CHIEF ENGINEER

PREPARED STATEMENT

Mr. LLOYD. Mr. Chairman and members of the committee, my name is Harry E. Lloyd, I am chief engineer and manager of the Hetch Hetchy water supply of the Engineering Bureau of the Public Utilities Commission of the City and County of San Francisco, Calif. I have filed a formal statement which I would like to have the privilege of having printed in the record and to supplement that with a few remarks.

Senator KNOWLAND. Your statement may be printed in full in the record.

(The statement referred to follows:)

STATEMENT BY H. E. LLOYD REGARDING FLOOD CONTROL ON THE SAN JOAQUIN RIVER, CALIF.

My name is Harry E. Lloyd. I am manager of the Hetch Hetchy Water Supply and chief engineer of the Engineering Bureau of the Public Utilities Commission of the City and County of San Francisco, Calif. This commission, among other duties, has jurisdiction over the domestic water supply of the city.

I am appearing before you in the interest of that commission and in support of the program developed by the Corps of Engineers, United States Army, for the control of floods along the lower San Joaquin River which originate on its principal tributary, the Tuolumne River, and in particular, with regard to the construction of the Cherry Valley Dam in California.

As you gentlemen may know, the Tuolumne River is the principal source of domestic water for the city and county of San Francisco and is also the source of

irrigation water for the 300,000 acres of farmlands within the confines of the Modesto and Turlock Irrigation Districts. These three agencies have spent close to $200 million in the development of the conservation features of the waters of the Tuolumne River and will expend additional sums as required in the future.

In 1940, the Corps of Engineers proposed the construction of a flood-control dam on the Tuolumne River. Negotiations between the Corps of Engineers and local interests resulted in the program recommended in House Document No. 2 of the 78th Congress. This recommendation was accepted by the Congress and became part of Public Law 435, in December of 1944.

The law contemplates the use of 5 existing and 2 proposed reservoirs owned and operated by local interests for flood control as well as for conservation purposes. The flood-control space is to be operated in accordance with rules and regulations prescribed by the Secretary of the Army.

By Contract No. DA–04–167 Eng.–38, certified September 26, 1949, between the United States of America and city and county of San Francisco, Turlock Irrigation District and Modesto Irrigation District, the rules and regulations prescribed by the Secretary of the Army were set forth and the monetary value of the flood-control service to be performed, estimated at $12 million, was established.

Payments by the Federal Government is being made only for the flood-control benefits received. I wish to make it very clear to you gentlemen, that the Federal Government has not been asked for any money for conservation purposes.

We feel that this project is in line with the thinking of President Eisenhower, who in his message to Congress on the State of the Union, said: "The best natural-resources program for America will not result from exclusive dependence on Federal bureaucracy. It will involve a partnership of the States and local communities, of private citizens, and of the Federal government, all working together."

Under the terms of the referenced contract, flood control is to be accomplished in three steps:

1. By December 1, 1949, operate existing facilities, owned by local interests, for flood control. These facilities have a storage capacity of 720,000 acre-feet.

2. By December 1, 1951, revised to December 1, 1954, complete Cherry Valley Reservoir with a capacity of 260,000 acre-feet.

3. By December 1959, complete the new Don Pedro Reservoir with a capacity of 1,200,000 acre-feet.

The above schedules are contingent upon adequate financing, both Federal and local.

Local interests since December 1, 1949, have been operating their facilities in the interest of flood control in accordance with their contract obligations.

The facilities necessary to perform step 2 are now being constructed. Small initial appropriations in 1948, 1949, and 1950, have retarded the completion date and added materially to the cost. To date, of the estimated Federal cost of $12 million, only $7,270,900 has been appropriated.

By separate agreement between the Corps of Engineers and local interests, the benefits for flood control under step 1 have a value of $4,600,000, and the combined steps 1 and 2 have a value of $9,000,000. The remaining $3,000,000 is allocated to the construction of the new Don Pedro Dam.

The value of the service as well as the necessity for step 2, namely, the building of Cherry Valley Dam, was demonstrated during the devastating floods of November and December of 1950.

The existing structures captured the November flood on the Tuolumne River which reached a mean daily flow of 86,745 cubic feet per second on November 19, during which a controlled release was maintained below Don Pedro. A second mean daily peak of 47,474 cubic feet per second on December 4 was also controlled. However, by December 8, 1950, all of the existing Tuolumne River reservoirs were full, and an uncontrolled flow of 64,500 cubic feet per second was discharged into the San Joaquin River.

It was this last flow which flooded the city of Modesto and contributed to the breaking of the San Joaquin levee system below the Mossdale Bridge, resulting in damage, estimated by the Corps of Engineers at $5,746,000.

Studies developed by our engineers have demonstrated that had the Cherry Valley Dam been completed at that time, the maximum flow reaching the San Joaquin River from the Tuolumne River would not have exceeded 12,000 cubic feet per second.

As stated previously, this project differs from most of the others before you in that local interests are providing substantial sums of money to finance the

conservation features of the project. All of the money necessary for the construction of the various features of the project in excess of the value of flood-control service, will be furnished by the local interests.

Our contract with the Federal Government provides that city and Federal funds be spent on a pro rata basis of the estimated $13,320,000 cost of step 2 (based on 1949 prices) of the project now under consrruction.

Dams and reservoirs, owned by local interests, and now being used under step 1 of this project, could not be built for less than $50,000,000 at this time.

The total Federal expense for the flood-control service provided in the structures built, or building, under steps 1 and 2 above, is established at $9 million.

The status of funds expended and to be expended on the Cherry River project to June 30, 1954, is as follows:

Funds expended or committed to date:	
Preliminary surveys and planning	$203,000
Construction completed (access roads, power line, camp at dam site)	1,228,000
Construction in progress (diversion tunnel, foundation excavation)	1,432,000
Engineering and general expense (including exploration, State fee, and consultants)	778,000
Total	3,641,000
(The work under construction is about 40 percent complete.)	
Additional funds to be expended or committed prior to Aug. 1, 1953:	
Dam construction, first stage	7,500,000
Engineering and general expense	360,000
Total	7,860,000
Additional funds to be expended or committed prior to July 1, 1954:	
Purchase of outlet valves	320,000
Engineering and general expense	25,000
Total	355,000
Total funds expended or committed prior to July 1, 1954	11,856,000
Funds available for completion of the above construction program to July 1, 1954	
Federal funds:	
Appropriated to date	$7,270,900
Contract payments to city to date	6,903,000
Retained by Corps of Engineers	367,900
Appropriation requested (1953–54)	200,000
Total	7,470,900
City funds: Bond funds required and available	4,385,100
Total funds required to July 1, 1954	11,856,000

Referring again to contract No. DA–04–167 Eng.–38, between the Federal Government and local interests, and to the above tabulation, it is established that of the $9 million contemplated as the Federal Government's share for flood-control service under steps 1 and 2, only $6,903,000 has been made available to the local interests, leaving a balance due of $2,097,000. I believe that this is the figure recommended by the California State Water Resources Board for inclusion in the original 1953–54 budget, which recommendation was contingent upon an increase in the overall authorization for flood control on the lower San Joaquin River, presently set at $8 million and which, as I understand it, is the subject of Senate bill 621 as introduced by Senators Knowland and Kuchel on January 26, 1953.

Realizing the situation, local interests understood the necessity for this request being reduced to $255,000 in the original Truman budget, and in conformity with the expressed policy of the present administration, that this appropriation be further cut to $200,000 we have revaluated the situation and well delete from our contracts, now ready for advertising, sufficient items which can be postponed in order that the construction may be carried on within the funds available. We are

specifically asking that this committee approve the Federal appropriation at this time of $200,000, which amount when supplemented by existing city funds, will make it possible for us to place an order for the necessary valves, estimated to cost $320,000 and which will take about 18 months for delivery. The postponement of the purchase of these valves due to the lack of such a small sum would result in about a year's delay in putting to beneficial use a development costing about $14,000,000.

Gentlemen, I know that the Corps of Engineers feel that this project is good business for the Federal Government. The local interests are satisfied. There is equity there. Each party pays for what it gets and that to me is good business.

I appreciate the opportunity of appearing before this committee and shall be happy to answer any questions the committee may care to ask.

In conclusion, I again urge that your committee include the sum of $200,000 in the budget for the fiscal year 1953–54 for continuing work on the Cherry Valley Dam as a part of the necessary structures required for providing flood control on the Lower San Joaquin River of California.

PROJECT DESCRIPTION

Mr. LLOYD. In speaking in support of the program developed by the Corps of Engineers and as authorized in the Flood Control Act of 1944, known as Public Law 534, I would like to give a thumbnail description of exactly the phase of the California flood-control projects that we are interested in. Mr. Cohen has spoken previously here in regard to the Stanislaus River and the levees along the lower reaches of the San Joaquin. The authorized flood-control project in the lower San Joaquin Valley consists of three essential features, storage on the Tuolumne River, it is the principal tributary of the San Joaquin, storage on the Stanislaus River and levees in the San Joaquin Valley where the damage is done.

TUOLUMNE RIVER

I would like to confine my remarks from here on to the development on the Tuolumne River. It has been mentioned by Congressman Mailliard that the city of San Francisco is interested in this project, and it is interested in it for the reason that we do have the Tuolumne River as the principal source of our domestic water supply and bring that water from the Sierra all the way to San Francisco through pipelines.

Senator HAYDEN. That is the Hetch Hetchy?

Mr. LLOYD. The Hetch Hetchy; yes, sir.

We are also interested in the agricultural areas surrounding San Francisco, and when it developed that the Corps of Engineers were proposing to build a flood-control dam on the Tuolumne River we were naturally interested in it as were our friends and neighbors in Modesto and Turlock Irrigation District. In the course of those discussions it developed that it would be more economical for the various interests to cooperate in the development of additional storage on the river to the end that a formal contract was entered into between the Corps of Engineers acting for the Federal Government, the city of San Francisco, the Modesto and Turlock Irrigation Districts, whereby in lieu of constructing an individual project under the Federal construction program that the Federal Government would pay to local interests the value of the flood-control benefits to be received not only from the new construction but also by using the existing facilities.

FUNDS PREVIOUSLY EXPENDED

The city of San Francisco went into the Tuolumne River in 1901 and in developing the Hetch Hetchy we spent probably $150 million. The Modesto and Turlock Irrigation Districts have spent close to $50 million in developing that river. The total obligation of the Corps of Engineers for flood control on that river in accordance with that contract is estimated at $12 million. So you can see that local interests are pretty heavily invested there.

Now the flood control is to be accomplished there in three stages: First, by using the existing storage facilities of the local interests and operating them for flood control as they are built, and that program has been in effect since 1949.

CAPACITY OF CHERRY VALLEY RESERVOIR

The second stage was adding an additional reservoir which we are here talking about, the Cherry Valley Reservoir, which will add another 260,000 acre-feet of storage to the river and to which a portion of the money appropriated through the Corps of Engineers is to be used in building that reservoir. The city of San Francisco on its own is contributing toward that development. The total cost of that individual reservoir is some $14 million, which will be added to the figures that I previously mentioned.

ESTIMATED COST

Now in the recommendations made to your committee by the Water Resources Board of the State of California, it is to be noted that a figure of $2,049,000, I think it is, has been recommended. That figure was arrived at by estimating the Federal Government's pro rata share of the construction to date. Those figures are subject to adjustment and all within the $12 million that I previously mentioned. However, we realize that due to the limitations of the authorization which is presently set at $8 million for this overall project that such an appropriation could not be made at this time, and we can understand how the budget, as prepared by ex-President Truman, had to stay within the funds available, and we can understand how that recommendation of our State Board was there reduced to $255,000 and later reduced again to $200,000.

REEVALUATION OF CONSTRUCTION PROGRAM

Now when I am speaking of those small amounts of money for an appropriation at this time we had to reevaluate our construction program for the present year and eliminate certain facilities that we could postpone although in doing so it adds materially to the cost of the project; you have to break up your contracts.

Now I particularly request that this item of $200,000 be allowed in this particular budget for the reason that that money is allocated for the purchase of certain valves that will take us from 14 to 18 months to acquire and if not committed at this time will delay the project. Now I know, gentlemen, that the Corps of Engineers figure this is good business for the Federal Government. The local interests are satisfied; each person involved pays for what he gets. The city of

San Francisco pays for everything that is allocated for conservation and domestic water supplies, the irrigation districts pay their share for irrigation and the Federal Government only pays for the flood-control benefits to be derived.

In furtherance of my statement that all interests are satisfied, I have as my companions here three gentlemen who represent those phases. I have Mr. Francis V. Keesling, who represents the mayor of San Francisco, Mr. A. M. Crowell, president of the Turlock Irrigation District, and Mr. Milton Kidd, who is a director of the Modesto Irrigation District. I would like the privilege of having Mr. Keesling address you for just a moment.

CITY OF SAN FRANCISCO, CALIF.

STATEMENT OF FRANCIS V. KEESLING, JR.

ADVANTAGES TO FEDERAL GOVERNMENT

Mr. KEESLING. Mr. Chairman and members of the committee, it is always a pleasure to come back here and see you again and particularly the same gentlemen, because you are familiar with our projects, and we do not have to take up too much of your time with them.

In the interests of time and also a clear and concise record I will endorse the detailed statement of Mr. Lloyd, with which I am familiar, and also the statements to be presented by Mr. Kidd of Modesto irrigation district and Mr. Crowell of the Turlock irrigation district.

Senator KNOWLAND. All of those statements may go into the record.

Mr. KEESLING. I do, however, desire to reemphasize that this is an exceptionally advantageous business transaction for the Federal Government. As Mr. Lloyd has pointed out, instead of the Federal Government spending large sums of money to build its own flood-control facilities, the Federal Government has contracted with the city of San Francisco and these irrigation districts to perform the necessary flood-control services for a much smaller amount of money by using the facilities owned, operated, and paid for by the local interests.

Therefore, I respectfully urge this committee to act favorably on our requests for appropriations.

SUPPORT OF INCREASED AUTHORIZATION

At this point I would also like to urge the members of this committee to support S. 621, which is the bill to increase the authorization. Our authorization has practically run out. The basic authorization as indicated in the original legislation stated specifically that it was to be for the purpose of initiating the project and for accomplishment of the project. That bill we are happy to note has had favorable consideration day before yesterday by the Subcommittee on Public Works and when that bill is cleared it will be the basis for funds and authorization with which to complete this project we hope next year.

Senator KNOWLAND. Thank you very much.

Mr. KEESLING. Thank you, gentlemen.

Senator KNOWLAND. Mr. Kidd?

MODESTO IRRIGATION DISTRICT, CALIFORNIA

STATEMENT OF MILTON L. KIDD, DIRECTOR

PREPARED STATEMENT

Mr. KIDD. I have only a formal statement, Mr. Chairman, that I would like to file on behalf of my irrigation district. My colleagues on the project have ably presented our position, and I think you need no further explanation.

Senator KNOWLAND. Thank you very much. Your statement will be printed in the record.

(The statement referred to follows:)

STATEMENT OF MILTON L. KIDD RELATING TO FLOOD CONTROL ON THE TUOLUMNE RIVER IN CALIFORNIA

My name is Milton Kidd.

I am a director of the Modesto Irrigation District, in Modesto, Calif. I represent that organization here today and am here in behalf of flood control on the Tuolumne River.

For the purpose of brevity I wish to state that in 1944, the 78th Congress, 2d session, adopted Public Law 534, authorizing flood control upon the lower San Joaquin River and its tributaries, including the Tuolumne River.

Contracts have been entered into between the Corps of Engineers, United States Army, the city and county of San Francisco, the Turlock Irrigation District, and the Modesto Irrigation District to operate the dams belonging to the local interests for partial flood control and to construct additional units to give complete control of the river.

The irrigation districts since entering this agreement have been carrying out their part of the contract operating their reservoir for flood control; however, this is not done without some risk to the irrigation water supply.

After the completion of the Cherry Valley Dam this risk will be substantially reduced. The additional flood control which will be obtained upon completion of this dam is also important.

The money being asked for this year along with that being put up by the local interest will be used for the purchase of valves, which if not ordered at this time will seriously delay completion of this project. I wish to emphasize that this project is one in which the local interests are financing the cost of all the conservation features and the Government is only being asked to pay for the flood control which it receives.

I have appeared before this committee on previous occasions and want to thank you for the fine cooperation and consideration which you have always given us in this matter which is of such great importance to the people of the area which I represent.

Mr. GRIFFITH. I believe Mr. Crowell has a statement.

TURLOCK IRRIGATION DISTRICT, CALIFORNIA

STATEMENT OF ABNER M. CROWELL, PRESIDENT

PREPARED STATEMENT

Mr. CROWELL. My name is Abner M. Crowell, president of the board of directors of the Turlock Irrigation District. I have a statement which I would like to file for the record, Mr. Chairman, and stress that we of the Turlock Irrigation District do endorse a cooperative agreement between the Modesto Irrigation District, city and county of San Francisco, and the Corps of Engineers, and do endorse Mr. Kidd's statement, the statement of Mr. Keesling and that of Mr. Lloyd.

Senator KNOWLAND. Thank you. Your statement will be made a part of the record.

Mr. CROWELL. Thank you.

(The statement referred to follows:)

STATEMENT OF ABNER M. CROWELL RELATING TO FLOOD CONTROL ON THE TUOLUMNE RIVER, CALIF.

My name is Abner Crowell and I am president of the board of directors of the Turlock Irrigation District in Stanislaus and Merced Counties in the San Joaquin Valley, Calif. The district supplies irrigation water to 165,000 acres of diversified crops; generates and distributes power for domestic use and industry within the area; and operates an effective drainage system. Our canals, reservoirs, powerplants, transmission lines, substations, pumps, and structures have been financed by bond issues and direct tax on the lands since the organization of the district in 1887.

The Turlock Irrigation District, the Modesto Irrigation District, and the city and county of San Francisco under a contract with the United States of America dated August 29, 1949, are obligated to operate their existing storage facilities in accordance with rules and regulations prescribed by the Secretary of the Army in order to obtain immediately a degree of control over Tuolumne River floods. In the comprehensive plan of development of the Tuolumne River the Government pays for flood-control benefits only, possibly 20 percent of the final project cost.

The districts and the city and county of San Francisco have been operating their reservoirs on the river for flood control under the direction of the Secretary of the Army during the last 4 years. These operations have been very successful. During the great flood of 1950 the peak flow of the Tuolumne River was reduced 44 percent by holding floodwater in the Hetch Hetchy and Don Pedro Reservoirs. Completion of Cherry Valley Reservoir has been postponed as a result of inadequate Federal appropriations for the project. The Cherry Valley Reservoir was to have been completed in 1951. We are now engaged in operating our reservoirs for flood control with considerable risk and expense but with no advantage or return for the service rendered. We will benefit only when Cherry Valley Reservoir is completed and in operation. Completion of the reservoir will make possible a very economical power development of 118,000 horsepower below the Cherry Dam and this power will be required to meet the growing demands of the city and the districts in a very short time. We are concerned over delays in the completion of Cherry Dam.

The final structure of the comprehensive plan of Tuolumne River development, the New Don Pedro Dam, as provided in the agreement of June 30, 1949, between the districts and the city and county of San Francisco will be started about 1960 and with its completion the Tuolumne River will be fully regulated by five reservoirs owned and operated by the irrigation districts and the city and county of San Francisco. Large storage capacity, exceeding the average annual flow of the river, will result in a regulated annual release of about 1,600,000 acre-feet as compared with a dry year natural flow runoff of 600,000 acre-feet and a wet year natural flow runoff of 5 million acre-feet. Flood flow peaks of 100,000 second-feet will be reduced to 7,000 second-feet or less into the San Joaquin River. This means a maximum use of the Tuolumne River for domestic water supply, irrigation, flood control, and electric power.

Money available at the present time is not sufficient to complete the dam and appurtenances. We recognize the need for economy in Government and we approve the efforts being made to reduce expenditures. However we do urge an appropriation of $200,000 by the Government to be applied to the purchase of valves and control structures which are estimated to cost $320,000. If these valves are ordered now with an 18-month delivery guaranty they will not be the cause of further dlelays.

The construction of the Cherry Valley Dam is under the jurisdiction of the city and county of San Francisco and details of expenditures made to date and to be made are being filed before the committee by the Public Utilities Commission of the City and County of San Francisco.

Senator KNOWLAND. We have another one of our members of the committee who has come in, Senator McClellan, of Arkansas, who is

also thoroughly familiar with flood-control problems and the difficulties that they have in Arkansas from time to time.

Senator McCLELLAN. They should see the letters I read today.

Mr. GRIFFITH. I would like to call Mr. Glenn M. Fountain, supervisor of Merced County.

MERCED COUNTY, CALIF.

STATEMENT OF GLENN M. FOUNTAIN, SUPERVISOR

PREPARED STATEMENT

Mr. FOUNTAIN. Mr. Chairman and gentlemen of the committee, I am going to be brief. I am Glenn M. Fountain, supervisor of Merced County. I am here with Mr. Kenneth R. McSwain, chief engineer of the Merced Irrigation District, Merced, Calif.

In addition to representing the county of Merced, we are appearing in behalf of the city council of Merced and the board of directors of the Merced Irrigation District. For 22 years I farmed between Bear Creek and Black Rascal Creek, the south fork of Black Rascal running through my ranch. I have a very detailed statement that I would like to have you file for the record, if you please.

Senator KNOWLAND. The statement will be printed in full.

(The statement referred to follows:)

STATEMENT OF GLENN M. FOUNTAIN, SUPERVISOR OF MERCED COUNTY, CALIF., AND KENNETH R. MCSWAIN, CHIEF ENGINEER OF THE MERCED IRRIGATION DISTRICT, MERCED, CALIF.

Mr. Chairman and members of the committee, my name is Glenn M. Fountain. I am a member of the Board of Supervisors of Merced County. I am here with Kenneth R. McSwain, chief engineer of the Merced Irrigation District. In addition to representing the county of Merced, we are appearing in behalf of the City Council of Merced and the board of directors of the Merced Irrigation District. For 22 years I farmed between Bear Creek and Black Rascal Creek, the South Fork of Black Rascal running through my ranch.

The Merced stream group is not a new project. It is, in fact, a 9-year-old project which is scheduled to be completed this year. It was authorized under Public Law 534, 78th Congress, 2d session (1944). This act provided for the construction of four flood-detention reservoirs on Burns, Bear, Owens, and Mariposa Creeks, and for two diversion canals—one to divert the flow of Black Rascal Creek into Bear Creek, and the other to divert the flow of Owens Creek into Mariposa Creek. State authorization was provided under chapter 1514, California State Statutes of 1945.

Since 1944, Mariposa Creek, Owens Creek, and Burns Creek Dams have been constructed, and money has been appropriated for the Black Rascal Creek and Owens Creek diversion canals. During the second session of the 82d Congress (1952), $200,000 were appropriated to begin construction of Bear Creek Dam, the last unit of this great project.

In January of 1953, California State Senator Hatfield introduced California Senate bill 1659, which provides for State cooperation in the matter of downstream channel clearance as requested by the Army engineers. This removes the last obstacle, so that construction of Bear Creek Dam can be commenced at once.

Two million two hundred and fifty-four thousand dollars has already been appropriated for this project with only $540,000 necessary for completion. This $540,000 was included in the budget for civil functions of the Corps of Engineers for the fiscal year 1954, as submitted to the Congress in January. The approval of this $540,000 appropriation will allow the completion of the entire $2,794,000 Merced stream group project.

It would, indeed, be false economy for this committee to fail to approve this last appropriation necessary to put this project into complete and efficient opera-

tion. Such action would not save the $540,000 requested, but would, in effect, waste much of the $2,254,000 already appropriated by Congress in the anticipation that this project would be completed.

In almost every year since the project was approved in 1944, representatives of the area have appeared before this committee and justified to the complete satisfaction of its members, the acute need for this project. This year, we come before you to ask approval of the $540,000 necessary to complete this project. Last year, $200,000 was appropriated to begin construction of the Bear Creek Dam. Approval of this request will allow the construction to continue uninterrupted to its completion. A delay until next year will cause construction to be stopped—and increased costs will result. This is the time when the project can be completed most economically. This is the time when the completed project is sorely needed. This is the time when Congress should move to complete a project which they have approved many times.

The need for the project increases with the passing of each day. This is due to the fact that the area is experiencing a continuous growth in population and expansion of agricultural, industrial, and general business activity. In addition, there is to be considered Castle Air Force Base, a key component of the Strategic Air Command, which is itself adjacent to the flood area and which has a large part of its personnel residing within said area.

When completed, the project will give flood protection to some 136,000 acres in Merced County, all of which is intensely cultivated, and included in the area is the city of Merced and the surrounding heavily populated areas in the communities of Planada, Le Grand, and Tuttle, having a total population of approximately 45,000.

During the November–December 1950 floods, the dam completed on Burns Creek prevented approximately $2,200,000 damage, most of which would have occurred in the city of Merced. The completed Mariposa and Owens Dams prevented damage estimated at $300,000. Even with these dams, surveys of the Corps of Army Engineers show that the 1950 floods caused damage totaling $395,000.

Last year, two floods occurred during January. The flood damage was substantial but not as much as in 1950. Again, much further damage would have occurred had it not been for the existence of those parts of the project already completed, but had Bear Creek Reservoir been completed, the damage would have been far less.

Because of the diversion features and the close interrelation of the areas subject to flooding from this group of streams, all project features are integrated and full benefits cannot be realized from individual structures until the project is completed as a whole. For instance, Bear Creek affords the greatest threat to the city of Merced and environs, and that threat will not be removed until Bear Creek Dam and Reservoir is completed and in operation.

HEALTH

The dangerous overflows of Bear Creek which occurred twice during the winter of 1952, produced a serious health hazard in those inundated areas. In recent times, areas of dense habitation have developed in the paths of the Bear Creek overflow. One such area is at the corner of Kibby Road and State Highway No. 140, which continues then to Childs Avenue, and on to the Weaver Union School at Childs and Coffee Avenues.

This flooding not only caused damage to homes and generally unhealthy conditions, but also caused flooding of septic tanks and wells. The Weaver Union School well remained polluted for over 45 days, because it was below the heavily populated area at Kibby Road and State Highway No. 140, where there are about 100 homes, wells, and septic tanks.

The health officer of Merced County urgently requests that immediate steps be taken for the badly needed flood control on Bear Creek. It is his opinion that the flooding of these wells by this sewage, contaminated for some time the underground water strata, endangering the health of many families, including a number of Army families who live in the area. This is just one specific example of many such situations resulting from the overflow of Bear Creek.

MILITARY ESTABLISHMENTS

Adjacent to this flood area is Castle Air Field, a large B–50 bomber base. The base if furnished with gas and power lines, which run through Merced and a severe flood could cut these lines and impair the operations of this air base for national defense.

SCHOOLS

In addition to the threat to this military base, our schools have been endangered. Weaver Union School was seriously flooded from Bear Creek with the drinking water contaminated for more than 6 weeks, endangering the lives and health of some 500 pupils. Other schools were similarly endangered by these floods. These schools obtain their domestic water from wells on the ground. There is no other available source of domestic water.

COMMUNICATIONS

The Bell Telephone trunklines traverse through this section from San Diego, north to San Francisco and the bay area extending to the Canadian border; also, Western Union Telegraph lines are involved. These lies, which are both underground and overhead, are endangered by serious floods.

POWER AND GAS

The Pacific Gas & Electric Co. has many high-tension powerlines crossing through the Merced Stream group area. Also, natural gas trunk supply lines that furnish natural gas to many of the communities between southern California, San Francisco, Oakland, and the bay area, where many key defense industries are established.

HIGHWAYS

United States Highway No. 99 running from the Canadian to the Mexican border travels through this area, also, the All-Year Highway to Yosemite Valley, (State Highway No. 140), which during World War II had extensive Army and Navy travel. Many farm-to-market roads in the floods in November and December were inundated—some of them for several weeks. The estimated damage by the Merced County Road Commissioner on farm-to-market roads in the Merced Stream group is $55,315. Since this estimate was made, many of the roads have broken down and replacement will probably cost several times that amount.

RAILROADS

The Southern Pacific Co.'s main line from Los Angeles to Seattle runs through the area flooded by the Merced Stream group, as does the Santa Fe from Los Angeles and San Diego to San Francisco, Oakland, and the bay area. Both lines handle a heavy traffic of food and fiber and military supplies. These roads carry main line traffic from the East, and are used as carriers of military personnel.

TRUCKS

One of the largest trucklines in California, Miles & Sons, which operates all over the State, has its main terminal in Merced. This truck service was seriously interrupted by the floods and at times there was a complete shutdown on transportation of their lines and many other truck lines. About 40 percent of Miles & Sons business is for the national-defense program.

FOOD-PROCESSING PLANTS

We have many canneries and food-processing plants in this flood area. The largest of these has been the Bear Creek Cannery and the Yosemite Freeze Plant, which are combined. A statement of their 1950 production summary is in the appendix.

Sixty to eighty percent of the processed foods were contracted by the United States Quartermaster Corps; all of the figs were contracted by the United States Quartermaster Corps. The November and December floods isolated their cannery and freeze plant, filled their drainage sumps with water from the floods, and drove all the rats in that area into the cannery and freeze plant making a health menace in that area.

The Planada Packers operate a cannery in the flood area which processed last year: 175,000 cases of figs, peaches, and apricots, of which 75,000 cases (estimated) of figs will go to the Armed Forces.

Ayers and Held operate a dried-fruit packing plant 1 mile from Bear Creek. Production for the last year is estimated at 300 tons, a substantial portion of which is usually delivered to the Armed Forces. This firm lost all its shipping

cartons during the November 1950 flood. Orchards of this firm have been seriously damaged by standing floodwater.

There are several other firms in this immediate area which process foodstuffs.

IRRIGATION

The Merced Irrigation District is in the heart of the flood area and the storms in recent years have done an extensive damage to their canals. This system irrigates most of the land under irrigation in the Merced stream group, and is very important in the production of farm produce for national defense. Lands flooded year after year build up underground water and interfere with agriculture and commercial business and necessitates the installation and operation of an extensive drainage-well system.

HOMES

Many homes in Merced and surrounding country were flooded. Wells were filled with water, some furniture ruined, and great damage was done to structures proper.

INSURANCE COMPANIES

The Farmers Insurance Group has completed a branch office south of Merced between Bear Creek and Mariposa Creek along the Southern Pacific Railroad and U. S. 99 Highway. This office employs about 500 people.

AGRICULTURE

An estimate of the serious and extensive 1950 flood damage to agriculture in the area comprising the Merced stream group, based upon spot checks and information secured from growers is in the appendix.

The flood damage in the 1952 flood was substantial but not as much as the 1950 damage. Photographs were presented to the committee showing examples of 1952 flooding during January of that year.

FLOOD DAMAGE ESTIMATES

The immediate flood damage in the November and December floods of 1950, according to surveys by the Corps of Army Engineers, is estimated at $395,000. A breakdown of this damage is shown in the appendix.

* * * * * * *

We therefore respectfully request that $540,000 be appropriated by this committee and by the Congress for the construction of Bear Creek Dam. This request has been approved by the California State Water Resources Board. Assurances have been given by the Corps of Engineers that construction can be finally completed if said amount is appropriated.

APPENDIX

FLOOD DAMAGE

1950

Agriculture.—Estimate of 1950 flood damage to agriculture in the area comprising the Merced stream group, based upon spot check and information secured from growers:

Alfalfa (6,500 acres), 2,200 acres flooded:	
1,600 acres damaged, immediate loss of feed, partial loss of stand	$48,000
600 acres total loss, at $130 [1]	78,000
Permanent pasture (11,000 acres):	
3,000 acres damaged, $10 per acre, loss of feed, reduction in stand	30,000
200 acres lost (plow, level, check, and seed)	14,000
Cotton, 400 acres, ½ bale per acre	26,000
Grain (barley, wheat, oats), 700 acres drowned or washed out	42,000
Milo, 400 acres not harvested	24,000
Turkeys, 3,000 head, at $6.50	19,500
Livestock	3,500
Rice, 120 acres not harvested	30,720
Feedstuffs, water damaged	10,000
Almonds (1,000 acres): Sour sap, gummosis, decrease in production	10,000
Peach, nectarine, and apricot: Erosion, sour sap, gummosis, rot, decrease in production	10,000
Figs: Erosion, improper pruning and timing of applications of insecticides and fungicides, decrease in production	15,000
Farm buildings, fences, etc	65,000
Total, 1950	425,720

[1] $80 loss of crop plus plowing, leveling, checking, and reseeding, $50.

1952

The flood damage in the 1952 flood was substantial but not as much as the 1950 damage. Photographs were entered into the record showing examples of 1952 flooding during January of that year.

FLOOD DAMAGES AS ESTIMATED BY THE CORPS OF ARMY ENGINEERS

The immediate flood damage in the November and December floods of 1950 as of surveys by the Corps of Army Engineers is estimated as follows:

Damage on Bear Creek above Bear Dam site	$5,000
Damage on Mariposa Creek above Mariposa Dam	82,000
Damage on Bear and Burns Creeks below Burns Dam and below Bear Dam site	275,000
Damage on Mariposa and Owens Creeks below Mariposa and Owens Dams	33,000
Total damage	395,000

FOOD-PROCESSING PLANTS

We have many canneries and food-processing plants in this flood area. The largest of these has been the Bear Creek cannery and the Yosemite freeze plant, which are combined. This is a statement of their 1950 production summary:

Product	Daily capacity, basis 24 to case	Frozen	Canned	Month
Broccoli	4,000	$300,000		November to March.
Sprouts	2,000	40,000		
Spinach:				
Fall	3,000	100,000	$100,000	November to December.
Spring	3,000	100,000	100,000	March to April.
Asparagus	3,000	140,000	60,000	April to May.
Cauliflower	2,000	50,000		
Boysenberries	4,000	40,000	40,000	June.
Strawberries	4,000	100,000		May to June.
Corn on cob	5,000	200,000		June to September.
Cut corn	2,000	75,000	75,000	June to October.
Apricots	10,000		200,000	June to July.
Freestones	5,000	150,000	100,000	August to September.
Kadota	5,000		100,000	September to October.
Applesauce	3,000		150,000	November to January.
Miscellaneous preserves	3,000		300,000	
Total		1,295,000	1,225,000	
Grand total		2,520,000		

Sixty to eighty percent of the processed foods were contracted by the United States Quartermaster Corps; all of the figs were contracted by the United States Quartermaster Corps.

AMOUNT NEEDED FOR PROJECT COMPLETION

Mr. FOUNTAIN. We have had over $2 million appropriated for this small project and lack $540,000 for completion. As I understand from the Corps of Engineers, this work can be completed in 1 year. We hope and pray that we will get your consideration. We would like to wind it up and get out of your hair once and forever.

At this time I would like to introduce Mr. McSwain, chief engineer of the Merced Irrigation District.

Senator KNOWLAND. Thank you very much.

MERCED IRRIGATION DISTRICT, MERCED, CALIF.

STATEMENT OF KENNETH R. McSWAIN, CHIEF ENGINEER

FUNDS REQUESTED FOR PROJECT COMPLETION

Mr. MCSWAIN. Senator Knowland and gentlemen of the committee, I am not even going to sit down. I would merely like to respectfully request that the amounts requested, $540,000, be allowed to complete this project. If there are any questions that any of the gentlemen of the committee might have, I would be glad to try to answer them.

Senator KNOWLAND. Have you not generally considered that these several dams were actually a part of one flood-control project; that they are self-supporting and without all of them really you do not get the benefit that has been contemplated?

Mr. MCSWAIN. That is correct. What has really happened has been that we now have over $2¼ million of Federal funds invested in this project, and that money is not receiving the use that it should until we get 24 more percent so that we will get 100-percent efficiency from the project.

Senator KNOWLAND. This was one of the situations where they considered the work a new start, a small dam which was needed to round out the entire Merced County stream group project.

Mr. MCSWAIN. Thank you very much, Mr. Chairman, and gentlemen.

Mr. GRIFFITH. I would like to call on James K. Abercrombie, of the Visalia Kaweah delta conservation district.

VISALIA KAWEAH DELTA CONSERVATION DISTRICT, CALIFORNIA

STATEMENT OF JAMES K. ABERCROMBIE, CHAIRMAN OF THE BOARD

PLANNING FUNDS REQUESTED

Mr. ABERCROMBIE. Senator Knowland and members of the committee, I am appearing here for the Kaweah Delta conservation district, city and county of Tulare, and as chairman of the board of trustees of reclamation district 761, which is the Tulare Lake area.

My appearance is in connection with the proposed Terminus Dam on the Kaweah River and the Success Dam on the Kaweah River, both of which streams are tributary to Tulare Lake Basin.

As the committee undoubtedly knows, the Kern River contributes to the Kaweah River at the northern end. It is my understanding that the dam on the Kern River will be completed this year. That is at Visalia. It is also my understanding that the intention is to complete Pine Flat Dam on the Kings River this year. These two dams are a part of the same overall plan for the basin.

As Senator Knowland stated, this is another instance of treating as new starts dams that have been authorized for many years and are a part of a plan of reclamation for that area. There has been expended on Success Dam for planning purposes some $401,300 and on Terminus Dam $343,500. It is our understanding that the Corps of Engineers could use and needs $100,000 on each project to complete planning and design of the dam. That is also the recommendation of the State board.

There are only two points that I would like to leave with you. One is that it is extremely essential that we complete this planning to determine the capacity of the dams and cost of the dams both for the committee's information and so that the local interests can make their arrangements to take over any irrigation benefits and pay for them, as they should do, and they are welcome to do. It is not a new project, it is something that is part of a general plan that is three-fourths completed and should certainly go ahead.

EXTENT OF FLOOD DAMAGE

The second thing I would like to leave with you for consideration is this: Each time a flood occurs on those streams it inundates about 100,000 acres of very rich farming land. Tulare County, as you all know, is a very rich agricultural county. The production there last year was about a quarter of a billion dollars, some $252 million of agricultural produce.

Aside from the damage to public health and safety which occurs always with floods, you have the damage to roads, bridges, and private property generally, and it is our feeling that the United States through the taxes that the Government rightfully collects is a partner in this transaction, and when those lands are put out of production, those crops are lost, running into millions of dollars in a good year, and the United States suffers as much loss as anyone else.

It is plain, in our opinion, good business to stop those floods and save that production.

I would like with your indulgence at this time to introduce Mr. W. A. Alexander, engineer-manager of the Lower Tule River Irrigation District. Before I do so, Senator, may I have my statement printed in the record?

Senator KNOWLAND. Thank you very much. Your statement will be printed in full.

(The statement referred to follows:)

STATEMENT OF JAMES K. ABERCROMBIE, REQUESTING FUNDS FOR TERMINUS DAM FLOOD-CONTROL PROJECT ON THE KAWEAH RIVER, LOCATED IN TULARE COUNTY, CALIF.

I am James K. Abercrombie, of Visalia, Calif., an attorney and member of the firm of Maddox & Abercrombie, appearing on behalf of Kaweah Delta Water Conservation District, the city of Visalia, and the county of Tulare to request the appropriation of $100,000 for the use of the Corps of Engineers, United States

Army, to complete the preparation of the surveys and plans for Terminus Dam located on the Kaweah River near Lemon Cove, in Tulare County, Calif. No request for construction money is being made at this time.

The construction of flood-control facilities on the Kaweah River was recommended by the Chief of Army Engineers in a report printed as Flood Control Document No. 1, 78th Congress, 2d session, and was approved by Congress in Public Law 534, 78th Congress, 2d session (H. R. 4485), adopted December 22, 1944.

The preliminary survey and planning on the project has already been commenced, and appropriations amounting to $343,500 have been expended to that end. We are advised that an additional $100,000 will be adequate to complete the preliminary planning as well as the design of the dam, and place the project in condition for the commencement of construction as soon as funds become available for that purpose.

The drainage area of the Kaweah River is in the Sierra Nevada Mountains, and comprises an area of approximately 630 square miles. The average annual runoff of the stream is approximately 420,000 acre-feet, but may vary in any individual year from a minimum of approximately 100,000 acre-feet to a maximum in excess of 1,100,000 acre-feet. After leaving the foothills on the easterly edge of the San Joaquin Valley the stream divides into several channels, spread over an area of approximately 340,000 acres. At the westerly edge of this area the channels converge and empty into Tulare Lake Basin, which is approximately 60 miles westerly of the point where the stream leaves the foothills.

In its flood stages the Kaweah River causes very extensive damage to many thousands of acres of highly productive agricultural lands in the middle and upper regions of the stream, and corrodes and destroys natural channels and irrigation facilities.

In addition to the flood damage to the agricultural community, the river in its flood stages also inundates towns and heavily populated areas, such as the cities of Visalia and Woodlake and the town of Farmersville. The damage in these areas in recent years has been extremely heavy.

In addition to other damage, the floods have caused tremendous damage to roads and bridges and have disrupted communications. The county of Tulare alone has expended more than $275,000 repairing flood damage resulting from the 1950 high water, and repairs are still in progress.

A further major damage occurs in Tulare Lake Basin, into which the floodwaters empty. The basin has no outlet and floodwaters accumulate there, putting out of production many thousands of acres of very productive agricultural land until the floodwaters can evaporate or be used for irrigation on lands which are not flooded.

The request for the construction of a flood-control dam at the Terminus site by the Army engineers is economically feasible and necessary. It should be borne in mind that the local interests have not been apathetic, but have taken all the measures within their means to solve the problem, but without success. The Kaweah Delta Water Conservation District, in cooperation with the county of Tulare and the city of Visalia have spent thousands of dollars in channel rectification and cleaning. Levee districts have been formed and have expended large sums of money in the construction of levees along the river in an endeavor to prevent floods. Many private interests along the stream have constructed their own levees and done other work to the same end. The Kaweah Delta Water Conservation District has purchased and operates a number of sinking basins or reservoirs to assist in controlling floods. In the Tulare Lake Basin there are a number of reclamation districts which have constructed tremendous levees at great expense, for the purpose of containing floodwaters. For example, Cohn Central Consolidated Reclamation District No. 761, of which I am president of the board of trustees, has constructed and maintains approximately 10 miles of earthen levee over 100 feet wide on the base and, for several miles, over 16 feet in height. This is only one of a number of districts in a similar situation. In addition to all these efforts on the part of the local interests for the direct purpose of controlling floods, I feel certain that the local interests will also be ready and willing to reimburse the Unied States for any incidental irrigation benefits which might accrue from the construction and operation of Terminus Dam.

Our request, therefore, is not based on a refusal of the local interests to move in their own defense, but is rather a request for help in combating the common enemy because we are unable to meet the situation unassisted. Your assistance is requested in the interest of the public welfare, health, and safety, but not upon that premise alone. There is a very valid, businesslike and practical reason why our request should be granted. Figures have recently been released by the Tulare

County Agricultural Commissioner indicating that the agricultural production of Tulare County for the year 1952 amounted to $252,727,816, more than a quarter of a billion dollars in 1 year. For many years the county has been among the first few counties in the Nation in agricultural production. The Tulare Lake Basin, which lies outside the county of Tulare, suffers loss of crops running into millions of dollars. Under our system of taxation of income, the United States is very much interested in the loss of this production in terms of dollars and cents. Prudence and the Federal Government's own self-interest indicate that control of the damaging floods is a necessity.

We fully recognize the present necessity for economy in Government. Our request is for $100,000 only, which is the minimum amount necessary to complete the planning and design of the project. We are not at this time making a request for construction money. Until the planning and design of the project is completed it is neither possible for the Army engineers to furnish you with up-to-date construction cost figures, nor is it possible for the local interests to take further steps to work out their own problems, which are necessarily dependent upon the capacity, cost, and method of operation of the project facilities.

Four major streams empty into the Tulare Lake Basin. Pine Flat Dam is now being completed on the Kings River at a cost of approximately $42 million and Isabella Dam is now being completed on the Kern River at an approximate cost of $21 million. The remaining two streams, the Tule River and the Kaweah River, are still in the planning stage, but it must be remembered that they contribute more than 27 percent of the floodwaters entering Tulare Lake Basin. The control of floods on all four streams are a part of a comprehensive plan of the Army engineers, and common sense dictates that reasonable steps be taken toward the completion of the plan and the protection of the investment of over $63 million already made on the Kings River and the Kern River. We respectfully submit that the request which we are presenting to your committee is the minimum amount which should be allowed.

COOPERATION OF ARMY ENGINEERS

Senator KNOWLAND. I might say when we had the engineers before us on the matter of the Pine Flat Dam, it was pointed out, and I expressed on behalf of both Senators from California and the California delegation in the House and also the people in the area down there, our appreciation for their cooperation in making available for the flood control purposes Pine Flat Dam to help the situation in the Tulare Lake area. Otherwise there would have been greater flooding.

It was bad enough, but it would have been much worse had it not been for the splendid cooperation of the Army engineers, and they responded very readily and helpfully.

Mr. ABERCROMBIE. There is no question about that, Senator. It is absolutely true.

Senator KNOWLAND. I will ask also that Congressman A. Oakley Hunter's statement appear in the record at this point.

(The statement referred to follows.)

STATEMENT OF HON. A. OAKLEY HUNTER, MEMBER OF CONGRESS FROM THE STATE OF CALIFORNIA—PINE FLAT DAM, KINGS RIVER, CALIF.

Mr. Chairman, the project for flood control for the Kings River and the Tulare Lake Basin was authorized for construction by the Corps of Engineers, United States Army, in Public Law 534, 78th Congress and commonly known as the Flood Control Act of 1944. It is not part of the Central Valley project of the United States Bureau of Reclamation.

The watershed of the Kings River lies on the western slope of the Sierra Nevada Mountains and covers an area of 1,600 square miles. All tributaries unite to form a single stream which enters the San Joaquin Valley at Piedra about 22 miles east of the city of Fresno.

The lands to be protected from floods, commonly known as the Kings River service area, embraces about 1,100,000 acres and is situated near the geographical center of the State of California and of the San Joaquin Valley, which is the southern lobe of the Central Valley of California.

It is my understanding that the latest estimate of cost of the project is $42,022,000. Congress has appropriated $38,872,000. This leaves a balance of $3,150,000 needed to complete the project. I respectfully urge your committee to approve an appropriation of sufficient funds to finish the job. The dam is now more than 95 percent completed. The concrete is all poured. The contractor is presently engaged in grouting the foundation and installing six 38-foot by 42-foot radial gates in the spillway at the top of the dam. He is already dismantling some of the installations in the aggregate pits preparatory to shipping them to a job in Japan.

The Kings River Pine Flat project, while primarily for flood control, will also serve irrigation and make power development feasible in the mountain watershed above the dam. It should be borne in mind, however, that the use of the reservoir for irrigation, while substantial, will always be incidental to flood control and will not reduce or impair its usefulness for flood control.

In order to have a public district empowered to contract with a Federal agency, there has been created by a special act of the State Legislature of California, the Kings River Conservation District embracing the entire irrigated area.

Contract negotiations for the use of the project for conservation purposes, temporarily halted by the change of the administration in Washington, are well advanced. It is believed that a contract will be executed in time to use the dam for conservation next year.

The water users and the people generally who reside in the area benefited are grateful to the Congress for providing sufficient funds to keep the project moving forward at the most economical rate of construction.

Their representatives who have appeared before the committees of both Houses of the Congress from time to time are very appreciative of your patience and understanding and the many courtesies which have been extended to them.

LOWER TULE RIVER IRRIGATION DISTRICT, CALIFORNIA

STATEMENT OF W. A. ALEXANDER, ENGINEER-MANAGER

PORTERVILLE IRRIGATION DISTRICT

Mr. ALEXANDER. I am W. A. Alexander, engineer for the Lower Tule River Irrigation District. I am appearing here on behalf of Porterville, the county of Tulare, and Porterville Irrigation District, which is affected from the floods along the Tule River.

I would like to endorse Mr. Abercrombie's statement and also have my formal statement introduced in the record.

Senator KNOWLAND. That will be done.

(The statement referred to follows:)

STATEMENT OF W. A. ALEXANDER, REQUESTING FUNDS FOR SUCCESS DAM FLOOD CONTROL PROJECT ON THE TULE RIVER, LOCATED IN TULARE COUNTY, CALIF.

I am W. A. Alexander of Porterville, Calif., chief engineer and manager of the Lower Tule River Irrigation District, appearing on behalf of the Lower Tule River Irrigation District, the county of Tulare, the city of Porterville, and the Porterville Irrigation District, for the completion of the plans and surveys for Success Dam located on the Tule River in Tulare County, Calif., so that construction may be started as soon as funds are available on the project.

The construction of Success Dam was authorized and approved by Congress in Public Law 534, 78th Congress, 2d session, H. R. 4485, adopted the 22d day of December 1944.

The purpose of this project is to provide flood-control protection for: (1) The city of Porterville and surrounding urban area; (2) thousands of acres of rich agricultural lands along the Tule River and in Tulare Lake Basin; and (3) State and county roads and bridges.

The city of Porterville is situated approximately 5 miles west of Success Dam site adjacent to the Tule River which flows along the south side of the city. Porter Slough is also a branch of the Tule River which flows directly through the center of town. The city of Porterville and the urban areas surrounding the city

have been repeatedly subject to floods from high flows in the Tule River and Porter Slough.

The course of the Tule River upon leaving Porterville is in a westerly direction, and it divides into several channels, traveling for a distance of approximately 36 miles where it terminates into Tulare Lake Basin. The river in its several channels throughout this 36-mile stretch flows through highly productive farmland which has been subjected to periodic floodings during high stages of the river. This has caused untold damage to growing crops as well as damage to the land, making it necessary for rehabilitation after the flood to be able to farm the same again.

Floodwaters from the Tule River reaching the Tulare Lake Basin have caused flood damage resulting in millions of dollars to rich agricultural land located in the basin.

In addition to the above, there has been considerable damage to county roads and bridges located along the Tule River.

The property owners and residents of this area have been in need of this project for many years in order to protect their lands and property. The Army engineers completed their necessary preliminary surveys and made a report on the feasibility of this project, which was approved and authorized by Congress in 1944. The people at that time had hopes that the project would be built immediately and they would no longer be subject to devastating and damaging floods of this river.

Since 1944 repeated requests have been made to the Congress for funds to build this project. The people in the area, including the city of Porterville, have expended large sums of money for levee work, headgates, and bank protection in order to protect their property along the river. Farmers in the area along the river, together with the county, have cleaned the river channels and increased height of levees which gives only temporary relief. Many thousands of dollars have been spent by individuals trying to help themselves in protecting their property. Farmers in and around Tulare Lake Basin have spent millions of dollars in levee work and drainage systems to protect their property and farmlands. All of this work does not and cannot solve the flood problem along the river, and the only solution is a flood-control dam.

Damaging floods on the Tule River occurring in recent years were in 1938, 1943, and 1950.

The flood of 1950 caused a break in the levee just east of Porterville on the main river and also washed out a secondary levee on the railroad track; sandbagging and other emergency work along with the river receding saved the city of Porterville and urban area, of approximately 14,000 population, from serious flooding and millions of dollars in damage to property. This may occur at any time and cannot be controlled with any degree of safety unless Success Dam is in operation.

The Lower Tule River Irrigation District which is only a part of the area which was flooded in 1950 sustained flood damage to over 20,000 acres suffering an agricultural crop loss of $200,000.

Flood flows in the Lower Tule River Irrigation District in February and March of 1938 and in March of 1943 covered in excess of 35,000 acres. Tulare County, as a result of the November 1950 flood on the Tule River, had to reconstruct two bridges which were washed out by the flood and expend many thousands of dollars on repairing county roads which were damaged by the floods. Farmers and property owners along the river immediately after each flood have expended large sums of money in repairing levees, cleaning our river channels, and replacing head works for irrigation diversion structures which are destroyed or damaged during the flood.

The Tulare Lake water-storage basin which is the sump area for all floodwaters from the Kings, Kaweah, Tule, and Kern Rivers also suffered tremendous damages as the result of the 1950 flood. The gross crop loss in this area along with necessary repairs to levees, pumps, and bridges was in excess of $1,400,000. It is realized that all of the water causing the damage in Tulare Lake did not come from the Tule River, but in the report to the directors of the district by their engineer, W. W. Ivans, for the 1950–51 season it shows the quantity of water from the Tule River to be 14,500 acre-feet out of a total of 86,732 acre-feet, or 17 percent of the total.

Tulare County in the protection and repair of its facilities due to the 1950 flood along the Tule River expended in excess of $128,000 rebuilding roads and bridges.

It is my understanding that the Army engineers to date have expended $401,300 for planning in advance of construction of this project on the Tule River. In order to complete this planning it is necessary to appropriate an additional $100,000. The people whom I represent are most anxious that construction

be commenced immediately on this project but realize that the additional planning must be completed prior to construction.

It is requested that your honorable committee recommend that Congress appropriate sufficient funds to complete this planning so that construction funds may be allocated for the next fiscal year to commence construction of this much needed flood-control dam and works, and follow up the same with additional appropriations so that construction can be completed by the Army engineers in an orderly and efficient manner.

To complete the picture of the flood-control projects protecting the Tulare Lake Basin area the following work has been completed and money expended:

Pine Flat Dam, located on the Kings River near Fresno, Calif., is virtually completed with a total estimated expenditure of $42 million.

Isabella Dam located on the Kern River east of Bakersfield is also virtually completed at an estimated cost of approximately $21 million.

To date there have been expended on these 2 projects a total amount of $63 million to provide flood protection not only to the areas along the rivers but to the Tulare Lake Basin. The Tule and Kaweah Rivers are tributary to Tulare Lake Basin and dump all their floodwaters into the lake.

According to the latest studies by W. W. Ivans, engineer for the Tulare Lake water-storage basin, the 49-year average inflow from 1904 to 1952 to the Tulare Lake Basin averaged 236,210 acre-feet annually—the Kings River contributing 43 percent; Kern River, 28 percent; Kaweah River, 15 percent; and the Tule River, 12 percent, so that in order to complete the protection to the valuable agricultural land in the Tulare Lake Basin as well as the property located along the Tule River, we earnestly request that your committee consider the necessary funds to complete the planning for this project.

Mr. ABERCROMBIE. May I introduce Mr. McCain, who is appearing on behalf of the Tulare Lake Basin Water Storage District?

TULARE LAKE BASIN, CALIF.

STATEMENT OF JAMES G. McCAIN, REPRESENTATIVE

PREPARED STATEMENT

Mr. McCAIN. Mr. Chairman and members of the committee, I am representing the Tulare Lake Basin Water Storage District in connection with the Terminus Dam and Reservoir on Kaweah River. Mr. Abercrombie has ably expressed our views in that matter, and we join in with him. I would like to request that my statement be made a part of the record.

Senator KNOWLAND. That will be done.

(The statement referred to follows:)

STATEMENT BY JAMES G. McCAIN ON BEHALF OF THE TULARE LAKE BASIN WATER STORAGE DISTRICT

TERMINUS DAM AND RESERVOIR ON KAWEAH RIVER

Authorization

The Terminus Dam and Reservoir on Kaweah River was authorized by Congress in Public Law 534, 78th Congress, 2d session (H. R. 4485) and adopted December 22, 1944. The plan of improvement was authorized substantially in accordance with the report of the district engineer as modified by the Chief of Engineers. Under continuing studies the Sacramento district engineer has issued a Preliminary Definite Project Report Terminus Dam and Reservoir, Kaweah River, Calif., dated June 20, 1949, to bring the basic data up to date. There is additional information available on this project which the district engineer has analyzed, but was not included in this report.

Kaweah River Tulare Lake area

The Kaweah River has a drainage area of 519 square miles on the western slope of the Sierra Nevada Mountains and flows out onto the Kaweah Delta of

about 300,000 acres where it is used for irrigation and spreading. The Kaweah River terminates in and is tributary to Tulare Lake Basin, a fertile saucer-shaped lake bed which has no outlet. The terminal waters of Keweah River empty into Tulare Lake Basin and combine with the inflows from Kings River to the north and Tule and Kern Rivers to the south. These waters create a large amount of flood damage in Tulare Lake Basin.

The Tulare Lake Basin area is within the Tulare Lake Basin water storage district, a district comprising 190,000 acres of rich lake bottom soil and is partitioned into retangular cells by levees which are progressively flooded as the inflow increases. There is a sump reservoir area in the lake bottom surrounded by reclamation levees covering an area of 30,000 acres, which will hold about 300,000 acre-feet of floodwaters. This area is flooded first and after it is full other cells are flooded as the levees fail. Almost all lands in Tulare Lake Basin including the sump reservoir are cropped each year, so any appreciable amount of inflow does considerable damage, as the lake bottom is relatively flat. The floodwaters are used for beneficial irrigation use after the flooding is over by gravity and pumping to adjacent lands which were not flooded.

At the present time Pine Flat Dam on Kings River and Isabella Dam on Kern River which were authorized in the above-mentioned Flood Control Act of 1944, are under construction and soon will be completed. Success Dam on Tule River which was also authorized in the 1944 Flood Control Act is not yet under construction. All four of these projects are part of the comprehensive flood control program of the Corps of Engineers to alleviate damage in the Tulare Lake area as well as the upper reaches of these streams. During flood flows Kaweah River creates considerable damage on the Kaweah Delta as well as to the city of Visalia, Calif.

Terminus Reservoir

In June 20, 1949, Preliminary Definite Project Report Kaweah and Tule Rivers, Calif., of the district engineer, Corps of Engineers, United States Army, the district engineer recommends a 203-foot high earth-fill dam with a capacity of 100,000 acre-feet to retain Kaweah River water for flood control and incidental irrigation purposes. The average flow of Kaweah River is 420,000 acre-feet per year, with a maximum flow of 820,000 acre-feet in 1906.

Flood damages from Kaweah River

The average annual benefits of Terminus project are $1,100,000 for the Kaweah River and Tulare Lake areas. In 1906 the flood damage in the Tulare Lake area from the 4 tributary streams was $15 million. The average annual-flood damage in Tulare Lake area from inflow from all 4 streams is $4,700,000. After Pine Flat Dam on Kings River and Isabella Dam on Kern River are completed and in operation there will remain considerable annual damage in the Tulare Lake area. These damages will be materially reduced by the construction and operation of the Terminus Dam on Kaweah River and Success Dam on Tule River. The ratio of benefits to cost of the Terminus Dam project for the 100,000 acre-foot reservoir is 1.7 to 1, making the project feasible as shown in June 20, 1949, report of the district engineer, and from data which they have analyzed since that date.

In the November-December floods of 1950 there occurred $1,455,570 of flood damage, and in the spring runoff of 1952 there occurred $8,305,610 of flood damage in the Tulare Lake area from the combined inflow of Kings, Kaweah, Tule, and Kern Rivers. The damage listed in 1950 and 1952 are direct damage of gross crop loss, levee-building costs, and damage to land, and do not include indirect losses of taxes, buying power, and other items.

Recommendations

We urge that this committee appropriate sufficient funds to complete the studies on Terminus Dam project on Kaweah River in order that the project can be constructed so that it will alleviate the frequent flood damages in the Tulare Lake area and on the upper reaches of the Kaweah River.

SUCCESS DAM, TULARE COUNTY, CALIF.

Senator KNOWLAND. The committee has received a letter from Mr. Roland R. Killian in opposition to planning funds for the Success Dam. That letter will be placed in the record at this point.

LAZY K RANCH,
Springville, Calif., May 7, 1953.

Senator STYLES BRIDGES,
Senate Civil Functions Subcommittee,
Senate Office Building, Washington, D. C.

DEAR SENATOR: I am informed that the proponents of the Success Dam in Tulare County will appear before your committee on May 15, to request the inclusion of $100,000 for continued planning and engineering on that project. This sum was not included in the Truman budget but was recommended by the California Water Resources Board. In 1951 over $500,000 had already been expended for that purpose.

On February 26, 1953, I wrote to you in opposition to this appropriation in behalf of the Springville center of the California Farm Bureau Federation, the committee against Success Dam, and the Porterville Grange. The opposition to the construction of Success Dam is widespread and includes persons residing above and below the dam site as well as the residents of Porterville.

The purpose of the dam is to protect the city of Porterville against floodwaters of the Tule River. Historically, the city has never been flooded by the river. Many years ago a large head of water flowed through Porter Slough and a few blocks were inundated. Since then a headworks has been installed at the head of Porter Slough which was effective enough to prevent any flooding within the city limits during the greatest flood of record in November 1950. The dam construction is based on a design flood of 31,000 cubic feet per second. The flood of 1950 reached a peak of 28,100 cubic feet per second. Design data stated that Porterville would be flooded with a peak of 18,000 cubic feet per second. Surely this is convincing proof that the engineering assumptions were far wrong.

The dam design submitted to the 78th Congress inferred that bedrock or an impervious base could be found at 30 feet. Explorations at the dam site since then by drilling and shafts, show that water-bearing detritus and gravel is over 140 feet deep. To excavate and install an impervious core at such a depth would patently be prohibitive in cost. An entirely new dam design would be necessary and the estimated cost of $10,106,000 in 1944 would not meet the construction costs of today.

No determination has been made for the distribution of the waters from the proposed dam for irrigation purposes. No estimate of new canals has been publicized. We do know that the Tulare Lake ranchers and land companies have filed for permits for water to be taken at the dam site for amounts in excess of 380,000 acre-feet—this on a river where the average annual runoff is 137,000 acre-feet.

The costs of the dam would far outweigh the claimed benefits. No history of floods in Porterville or the rural lands in the delta region can justify the construction costs of the dam, and far more people would be injured by the fight for the redistribution of waters which would result from its construction than would be benefited.

No immediate need can be proven for the construction of the dam; no economic justification can be shown as a long-range project. We respectfully request that any request for the inclusion of any sum for further planning on Success Dam be rejected by your committee.

Yours truly,

ROLAND R. KILLIAN,
Chairman, Water Committee.

Mr. GRIFFITH. Mr. Chairman, that completes our testimony. We thank you for your patience.

I believe Mr. Leedom wants to introduce two statements.

Mr. LEEDOM. Mr. Chairman, I have two statements from the County of San Bernardino, one on San Antonio Dam and Channel project and the other in connection with the Santa Ana River and tributaries.

Senator KNOWLAND. They may go into the record.

(The statements referred to follow:)

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT,
San Bernardino, Calif., May 5, 1953.

The board of supervisors of the San Bernardino County Flood Control District hereby expresses the appreciation of the people of the county and of the State of

California for the fine interest and accomplishments made by the various committees and by the Congress of the United States as regards the San Antonio Dam and Channel projects.

These projects were authorized by the 75th Congress, 3d session, Document No. 688 (Flood Control Act approved June 22, 1936, and as amended August 28, 1937), and subsequently appropriations to begin construction of the dam were made.

Realizing that there have been changes in the membership of congressional committees, and to emphasize the urgent need for further appropriations in order that an orderly construction program may be completed, the statement attached is hereby submitted.

We call to your attention the fact that this project has received presidential approval as a war emergency measure.

It is the sincere hope of this board that approval will be given for an appropriation of at least $3,500,000 and construction work on the dam may be completed within the next 2 years.

BOARD OF SUPERVISORS, SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT.

SAN ANTONIO DAM AND CHANNEL PROJECT, A STATEMENT BY THE BOARD OF SUPERVISORS OF THE SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT SAN BERNARDINO COUNTY, CALIF.

SAN ANTONIO DAM AND CHANNEL PROJECT

The Board of supervisors of the San Bernardino County Food Control District, which is a countywide district organized under the provisions of chapter 929, statutes of 1945, a special act of the legislature of the State of California, urges that additional money be made available for the continued construction of the San Antonio Dam and flood control project, which project has been authorized and which is the subject of reports heretofore presented to Congress by the Corps of Engineers.

Those reports are favorable to the project and set out in considerable detail its necessity, its economic justification, and the urgency of the work which is proposed. They are available and familiar to you, so detailed repetition by us is thought not to be necessary.

We do, however, wish to emphasize certain matters, and to call your attention to ones possibly not directly dealt upon in other reports.

The mountain drainage area tributary to the proposed dam is about 27 square miles. That area, because of topographic features and relation to desert and ocean influences, is subject to intense rainfalls and cloudbursts. The average yearly rainfall varies from about 22 inches at the dam to 40 or 50 in higher regions. During storms of great intensity rainfalls of as much as 16 to 18 inches per 24 hours have been recorded.

United States Geological Survey Water Supply Paper 847 at page 261 shows San Antonio Creek as producing the highest runoff rate per square mile of all United States streams listed in said table.

The elevations within the watershed vary from approximately 2,100 feet at the dam to as much as 10,000 feet, and San Antonio Canyon itself has a fall of between 700 and 800 feet per mile. This canyon empties upon a large, unstable fan-shaped debris cone of rather recent origin, and the stream as it leaves the canyon mouth can, under present conditions, range through an angle of more than 90°.

The stream at flood time with a comparatively small changing of conditions can leave its poorly defined channel bed and continue in any direction over this 90° width. The slope of the cone is from 3 to 6 percent.

Almost unlimited amounts of detritus are in the great morainelike moving rock and gravel slides in the upper canyon reaches.

It is this combination of steep slopes, intense rainfall and runoff, and unlimited masses of loose material being transported onto this unstable debris cone that made the situation so menacing and dangerous.

There are six cities and several smaller communities, together with a closely built up urban development of homes and citrus orchards immediately within the easily possible course of this rock- and gravel-laden stream. Three transcontinental railroads, an interurban electric line, three interstate, cross-country State highways and innumerable county highways and city streets cross and traverse this threatened area.

As is true in all of southern California, settlement and development have been rapid in this vicinity during the past several years. This location is about midway between the cities of Los Angeles and San Bernardino and about 25 miles from each. Within a very few years this entire distance will be closely built up and densely inhabited. The cities immediately involved are Upland, Ontario, Chino, Claremont, Pomona, and LaVerne.

The increase in assessed valuation of a part of the area in San Bernardino County is as follows:

	1938-39	Assessed valuation	
		1949-50	1950-51
Ontario City	$8,776,220	$16,785,010	$17,950,010
Upland City	5,248,280	8,221,990	8,286,430
Chino City	1,612,470	4,598,920	4,641,110
Ontario outside (west of Euclid Ave.)	,555,100	2,369,010	3,785,340
Upland outside (west of Euclid Ave.)	469,287	806,439	
Chino outside (west of Euclid Ave.)	1,249,550	2,373,000	

The water from the San Antonio watershed is that which is largely necessary for the support of these cities and for the support of extremely valuable citrus districts, and also for the replenishment of several underground basins from which much of the water supply of the area is obtained. The overdraft in that portion of the Chino underground basis dependent upon San Antoino Creek is now from 4,000 to 5,000 acre-feet per year.

Several hundred thousand dollars of local money have been spent in the construction of conservation works and spreading grounds, but the saving of water in time of large floods is feasible only by detention storage and debris removal, both of which the proposed dam will provide in satisfactory form.

Damaging floods have occured on this stream in the years 1906, 1909, 1914, 1916, 1922, 1927, 1938, and 1943. Certain statistical data taken from one of the preliminary examinations, reports having to do with damage from these floods is attached hereto.

We honestly and sincerely believe that a very serious flood hazard exists below the canyon portion of San Antonio Creek, and that the situation is so critical that every possible effort that can be made to the end that the stream be controlled and confined by regulation and channel improvement will be justified.

Population statistics

	1940	1950
San Bernardino County (increase 80 percent)	161,108	[1] 289,800
Ontario	16,044	25,594
Upland	7,118	10,174
Chino	7,483	8,654
West End area: Pomona, Claremont, Chino, Ontario, Upland	95,655	150,000

[1] Estimate by California Taxpayers' Association.

San Bernardino County has experienced one of the largest increases of population in the State and Nation.

Population increases from 1940 to 1950: [1]	*Percent*
State of California	43
Los Angeles County	34
Orange County	32
Riverside County	31
San Bernardino County	80

[1] Estimate by California Taxpayers' Association.

(Estimates based on calculations by the California Taxpayers' Association, the San Bernardino County Election Department, and the San Bernardino County Chamber of Commerce.)

SAN ANTONIO CREEK—DAMAGES FROM FLOODS

(From statistical data in preliminary examination report on Santa Ana River and tributaries, dated February 15, 1939.)

(Description of flood—flood-year 1913–14, p. 41)

In Ontario, Euclid Avenue was a raging torrent and side streets were full from curb to curb. West F Street was badly washed at Laurel Avenue; San Antonio Avenue also suffered, as did Vine Avenue. Most of the streets sustained minor damages. At A Street, storm waters were turned into the new catchbasins and into the old storm drain, relieving the flood at A Street and Euclid Avenue (January 26, 1914). On Fourth Street, the new bridge stood, but there was room for six bridges east of it. The Eighth Street bridge went out (January 27, 1914). On East Ninth Street, Ontario, water 6 feet deep and 60 feet wide came from north of the Pacific Electric Railway tracks onto a tract of land owned by A. P. Moreman. The water went on through Ninth Street and over lots belonging to Arron Brest, then south to the Atchison, Topeka & Santa Fe Railway, flooding homes south of Ninth Street. (Above was local runoff, not San Antonio Creek.)

On Euclid Avenue at 22d and 23d Avenues, great damage was done to groves. The wall was washed away north of the Paul groves and water came down into the orchards. The Ninth Street road was washed out as it had been in January (February 19, 1914). On the east side of Euclid Avenue, water tore a gulch in a barley field above 24th Street out through the Paine grove to the Stewart grove and flooded that entire section (February 27, 1914) local runoff.

Upland experienced its greatest rain. Every avenue running north and south was filled from curb to curb. In every section, water tore through stone walls and ditches and washed orange groves. The Upland downtown district suffered little damage, but in the northern part of the city, groves from 24th Street south on the west side of Euclid Avenue were badly washed (local runoff).

The city of Ontario was isolated; all connecting roads were washed out in many places. The Southern Pacific Railroad lost sections of track at Etiwanda. East of Etiwanda floodwaters cut off Ontario from Colton, Riverside and San Bernardino near the plant of the Southern California Canning Co. on East State Street. Between Upland and San Bernandino the tracks were soft and all trains were annulled. The new line of the Pacific Electric Railway to San Bernardino was washed out in several places. Floodwater went through recently completed fills, leaving rails and ties dangling high. The auto road also suffered. Foothill and Valley Boulevards were a mass of ravines and gullies in spots where the water concentrated in flood strength (local runoff).

About 150 feet of flume washed out in the San Antonio Canyon, and the local (Ontario) water supply became muddy. San Antonio Creek was a raging torrent that swept everything before it. Its floodwaters reached to the Chino foothills. It was estimated that the stream flowed 140,000 miner's inches most of the night of January 26. In the hills back of Stoddard's Canyon the rainfall was great adding to the flood in San Antonio Canyon. San Antonio Creek tore out the 10th Street bridge and the Southern Pacific Railroad bridge south of A Street, 9 miles from the mouth of the canyon (January 27, 1914).

In the Ontario-Upland area, rainfall for the season totaled 22.47 inches. In the northern part of Ontario groves from 24th Street south on the west side of Euclid Avenue were badly washed. A cloudburst in San Antonio Canyon was the principal cause, and as usual in cases of damage to orange groves and valuable property, gutted by the stream (January 29, 1914).

(Flood year 1916, p. 48)

San Antonio Creek had become a river, washing out its bridges (January 17, 1916). Damage in Pomona district was estimated at $500,000. More than 200 passengers were held up on eastbound trains at Pomona. Twenty-five tourists were marooned at Camp Baldy where rain came down at the rate of 1 inch per hour, sending destructive floods to the valley lands below. A portion of the new State highway was washed out in the Pomona district. At Claremont dynamite was used to divert floodwaters into the old channel of San Antonio Wash to save Pomona College buildings from destruction. A number of orange groves were damaged by the flood, and ranch houses stood in 3 feet of water (January 18, 1916). The cloudburst caused waters to sweep out of San Antonio Wash and cut across the country to the Claremont School for Boys, which was surrounded.

(Flood year 1921–22, p. 50)

San Antonio Canyon was wrecked. Water came from the canyon down San Antonio Avenue, damaging streets and washing groves badly. The 11th Street Bridge was washed out and washouts of the Pacific Electric Railway and the Atchison, Topeka & Santa Fe Railway kept those railways out of operation (February 26, 1922).

(Flood year 1926–27, p. 52)

In San Antonio Canyon a heavy rain had fallen for 48 hours, and the creek rose rapidly at Ice House Canyon. Kelley's Camp was buried in 10 feet of snow, and it was expected that the rain would melt the heavy snows augmenting the flood in San Antonio Creek (February 15, 1927).

(Flood year 1937–38, p. 55)

According to the United States Weather Bureau, the storm of February 27 to March 3, 1938, originated in the North Pacific Ocean west of Alaska, February 24, 1938, and traveled southeasterly following the coast of Canada and the United States, reaching its greatest intensity in southwestern United States in southern California, southern Arizona, and southwestern New Mexico.

In southern California, the precipitation occurred during the period February 27 to March 3, 1938, and reached its highest intensity during the 7-hour period from 3 a. m. to 10 a. m. on March 2. During the period, 3.8 inchesof rain were recorded in Los Angeles, or at an average rate of 0.54 inches for the 7 hours. In the mountain areas, a greater rainfall intensity occurred during about the same 7-hour period, and this caused maximum flood crests in the streams of southern California.

The storm caused great damage in southern California, southern Nevada, and parts of Arizona. A large number of homes were completely destroyed or badly damaged. Railroads and highways suffered damage estimated at many millions of dollars due to the destruction of bridges and roadbeds. Other facilities, such as telegraph, telephone, gas, and water were severely damaged. For a time, all lines of communication were cut off from some localities, except those served by airplanes and by radio. In the Los Angeles Engineer District, the loss of life from the storm is estimated at 87 and in addition 9 persons were reported missing 3 months after the flood.

DEVIL CREEK DIVERSION, EAST TWIN CREEK CHANNEL, WARM CREEK CHANNEL, AND LYTLE CREEK LEVEE UNITS OF THE SANTA ANA RIVER AND TRIBUTARIES, CALIFORNIA, PROJECT

The board of supervisors of the San Bernadino County Flood Control District in California wishes to respectfully but urgently request appropriation of at least $100,000 in funds for advance planning work on the Devil Creek, East Twin Creek, Warm Creek, and Lytle Creek units of the project known as Santa Ana River and tributaries, California, as reported favorably by the Corps of Engineers in House Document No. 135, 81st Congress, 1st session. Hearings were had on this project May 16 to June 2, 1949, by the Committee on Public Works of the House of Representatives, 81st Congress, as shown in No. 81–5, pages 695 et seq. The project was authorized by H. R. 5472, 81st Congress, 1st session.

The project includes 4 units, 2 in Riverside County and 2 in San Bernardino County. They are each important and necessary and should be completed at the earliest possible time.

However, in our opinion, that one which has for its object the control of Warm Creek Channel, East Twin Creek Channel, Devil Creek diversion, and Lytle Creek levee—all for the protection of the city of San Bernardino and industries and facilities very definitely of extreme importance in the war effort—from floods reaching the area from the north and east—is of vital and immediate importance.

The seriousness of the flood hazard is caused by the fact that the city of San Bernardino and its environs is located at the foot of a high range of mountains. These mountains rise from valley elevation of from 1,000 to 1,600 feet to an elevation of from 5,000 to 12,000 feet. Because of topographic features, these mountains being approximately parallel with the Pacific Ocean and about 50 miles inland thus constituting a barrier for moisture-laden clouds being transported from the ocean toward the desert—the slopes of these mountains are subject to an intense rainfall. Over a 70-year period, the tops of the mountains have averaged

about 45 inches of rainfall per year while at the base the average has been about 16 inches per year.

The canyons along the front face of the mountains then carry a great amount of floodwater and debris which debauches upon the settled and improved area on the valley floor. These floods cause great damage to valuable agricultural areas, to residential, business, and industrial properties, to railroad and highway facilities, to essential irrigation and domestic water supply systems, to public utilities including transcontinental communication cables, oil and gas mains, and electrical transmission lines, together with all facilities available to a very rapidly developing industrial, business, and residential area.

Certain of these communication facilities and gas and electrical installations are transcontinental in scope and are absolutely essential to the industrial economy of the Los Angeles metropolitan area.

Norton Air Base, which was extensively used as a vital unit through World War II is rapidly expanding and is assuming a very important role in the present national emergency effort. This base, together with railroad and highway connections, could be seriously damaged by floods escaping from these channels.

Since the survey and report by the Corps of Engineers, large installations housing a National Guard armory, a Naval Reserve training center, and many light industrial enterprises have been established within the limits affected by these floods.

The flood problem north of the city of San Bernardino is typical of the problem in the entire southern California area where the valley floor has as its perimeter a high mountainous terrain. The slopes in the upper ranges of the tributaries are very steep and the flow of flash floods passes quickly and causes tremendous damage from inundation.

The overflow area of Devil, Waterman, and East Twin Creeks from the base of the San Bernardino Mountains to the overflow area of Warm Creek and the overflow area of Warm Creek to the junction of East Branch of Lytle Creek is estimated at 10,300 acres. At present Devil Canyon discharges upon a steep debris cone extending 1½ miles out into the valley north of San Bernardino with a dispersion angle of 60°. A gently sloping plain 1 mile in width extends southeasterly to the easternmost point of the Shandin Hills (Little Mountain).

All drainage from Devil Canyon now, upon rounding this hill, discharges uncontrolled upon the north and residential area and business district between Sierra Way and I Street.

This area comprises the major portion of population and assessed valuations. The downstream channels have been obliterated by streets, business and residential developments.

The proposed project plans to divert Devil Creek floodflows to Cajon Creek. This would be accomplished by constructing an intercepting levee extending westerly across the existing channel of Devil Creek about 1¼ miles below the apex of the cone (and below the present spreading grounds) to the low range of hills along Kendall Drive, and a concrete channel southwesterly to Cajon Creek within the limits of the Lytle-Cajon Creek Army project.

It has been recognized that this Lytle-Cajon Creek project now completed by the United States Engineer Corps was designed as an emergency war necessity. It without doubt provides adequate protection for the westerly portion of the city of San Bernardino and for the railroads, highways, and other facilities which were in jeopardy during the recent war.

It has likewise been recognized that certain areas within the project containing water wells for municipal and domestic use and for supply to large agricultural districts of high value are still subject to appreciable damage from floods. The concrete channel from Devil Canyon as proposed would conduct additional floodwater into this territory. These conditions were considered by the Board of Engineers for Rivers and Harbors when this Santa Ana River report was being reviewed, and that body in its report to the Chief of Engineers recommended that an additional levee be built upstream from the island levee, which is along the right side of Lytle Creek just downstream from the confluence of Lytle and Cajon Creeks, for the protection of the very valuable wells in that location. It is strongly urged that this levee be constructed.

The mouth of Waterman Canyon is located about 4 miles northeast of the central business district of San Bernardino. One-fourth mile to the southeast is the canyon mouth of East Twin Creek. By successive deposition of debris, floodwaters from these two canyons have built a cone extending 4 miles in length to Warm Creek on the south and 3½ miles in width from I Street on the west to Sterling Avenue on the east. The cone is typical of all steep alluvial fans, being

a wide-angle cone upon which unrestrained floodwaters are at liberty to occupy any position through an angle of 90 degrees for a distance of 2½ miles below the apex. Its apex is forming at the mouth of Waterman Canyon at an elevation of 1,000 feet. The major axis (crown) of the cone extends southwesterly 2 miles toward the most highly developed business and residential district of San Bernardino and facilities heretofore mentioned, then assumes a southerly direction along Waterman Avenue.

From the apex the present course of Waterman Creek continues southwesterly on the crown for 0.2 mile, then swings to the left, assuming a southeasterly course and at a point 0.8 mile from the apex joins present East Twin Creek, Wash.

The slope of the present Waterman Creek streambed from the apex (elevation 1,600 feet) for the distance of 0.8 mile to its junction with East Twin Creek (elevation 1,385) is 215 feet (270 feet per mile) as compared to the slope of the major axis from the apex (elevation 1,000 feet) southwest toward San Bernardino for an equal distance of 0.8 mile to a point (elevation 1,355 feet) which is 245 feet or 306 feet per mile.

A comparison of the two gradients augmented by the curve in the streambed indicates that there is no inducement for the present course to remain permanently stable. It is easily possible that the entire flow could abandon the present course and ride the crest of the cone for miles through entirely new territory.

The Santa Ana River report recommends a plan to revert earth-filled levees constructed by local interests to collect flows from Waterman and East Twin Creeks and to construct a concrete channel along East Twin Creek from the end of those levees to and crossing Warm Creek and thence southwesterly to a point near Warm Creek south of San Bernardino.

The San Bernardino County Flood Control District engineering department has examined the proposed improvements and recommends them as adequate for the purpose.

Watershed data	Devil Canyon	Waterman	East Twin
Maximum discharge, 1919–49	3,320 cubic feet per second.	2,350 cubic feet per second.	3,360 cubic feet per second.
Date (4 p. m.)	Mar. 2, 1938.	Mar. 2, 1938.	Mar. 2, 1938.
Mountain drainage area	6.3 square miles.	4.55 square miles.	8.6 square miles.
Minimum altitude	1,800 feet.	1,600 feet.	1,650 feet.
Maximum altitude	5,350 feet.	5,400 feet.	6,150 feet.
Average altitude	3,560 feet.	3,620 feet.	3,520 feet.
Average slope	42 percent.	50 percent.	47 percent.
Length mainstream channel	4.5 miles.	4.5 miles.	4.8 miles.
Average slope, stream channel	13 percent.	14 percent.	18 percent.
Rainfall (March 1938 storm total):			
Base of mountain	12 inches.	12 inches.	12 inches.
Mountain crest	24 inches.	24 inches.	26 inches.
73-year mean:			
Base of mountain	25 inches.	23 inches.	23 inches.
Mountain crest	40 inches.	40 inches.	45 inches.

Excessive precipitation recorded at Squirrel Inn, elevation 5,300 feet (in East Twin Creek watershed)

Storm	Maximum 24 hours		Maximum 48 hours		Storm total (inches)
	Inches	Date	Inches	Date	
Jan. 14–20, 1916	16.81	17th	22.61	17th–18th	27.77
Feb. 27 to Mar. 4, 1938	10.97	2d	15.67	2d–3d	26.17
Jan. 21–24, 1943	10.40	23d	16.85	23d–23d	17.95

Warm Creek below East Twin Creek confluence, peak discharges 1884 to 1949

Date	Flood No.	Estimated peak discharge (cubic feet per second)
Mar. 2, 1938	1	6,700
Feb. 23, 1891	2	6,400
Jan. 18, 1916	3	4,700
Mar. 6, 1884	4	3,600
Feb. 17, 1884	5	2,900
Feb. 21, 1914	6	2,300
Jan. 23, 1943	7	2,100

The areas which are exposed to flood hazard from these various streams are probably developing as fast as any in the entire Nation, not only for civilian use, but also for military operations. We know that the threat from flood is extremely serious. Therefore, our very sincere request is that this committee give full consideration to the recommendations contained in the report on survey of Santa Ana River and tributaries, California, to the end that an appropriation may be made this year so that the project may be constructed in an orderly fashion and its completion accomplished at an early date.

STATEMENT BY CHAIRMAN

Senator KNOWLAND. At this time I want to thank on behalf of the committee both Mr. Griffith and Mr. Leedom for the very efficient way you have worked out the time schedule. We have been holding long hearings, evening sessions, and running into such long days that my committee has been nicknaming me "Simon Legree" for keeping them in session so long. We do appreciate and recognize that you people could probably use a great deal more time and we wish we could give you more time.

Senator ELLENDER. I was about to compliment our chairman for having trained the California delegation so well and taking such a small amount of time.

Mr. GRIFFITH. Seriously we have enjoyed coming here for a great many years. We think it best for you and best for us that we make our testimony concise, and we adhere strictly to our time schedule.

Senator KNOWLAND. Thank you very much.

General Chorpening?

STATEMENT OF BRIG. GEN. C. H. CHORPENING

EFFORTS OF CORPS OF ENGINEERS

General CHORPENING. With reference to the comments that the chairman made on the Los Angeles project, I would like to make a comment there which is applicable to some other projects around the country; that the record would show that the Corps of Engineers has made pretty strong efforts to secure more funds than actually came.

Now if we are to blame perhaps we did not present the case strongly enough, but, sir, we have tried.

I can also mention this, that since General Sturgis became Chief of Engineers, not long ago, he has discussed some of these matters with me, and he feels personally very strongly that many of our projects have dragged, it is not for me in any way to criticize the budget

allowances, but we do feel that way; that where they drag out and there are many projects that way that we are making investments in which we simply are not getting the dividends in the time we should. We will continue to make, sir, within the limits given to us and the criteria given to us, our best efforts to prepare the facts and do our best to prevail where we can.

PLANNING FUNDS FOR CARBON DAM

I would also mention the question was asked about required planning funds for Carbon Dam, $50,000 additional will be required. One more comment in connection with the Old Sacramento project. It was mentioned here that there were certain matters as between the Federal Government and the State that had not been ironed out. I personally went to California last year and had a very fine cooperative meeting with the State reclamation board. We were able to resolve our problems, and as a consequence this year in the budget there is a much greater request for funds to go ahead and complete that project than we have had in the past.

I wanted to make that clear to the gentlemen from California, that we did appreciate the very cooperative action that they gave to us.

Senator KNOWLAND. Thank you very much, General.

Mr. GRIFFITH. Again, gentlemen, thank you.

Senator KNOWLAND. The next witness is Mr. M. D. McCarl from Redwood City Harbor.

PORT OF REDWOOD CITY, CALIF.

STATEMENT OF M. D. McCARL, MANAGER

PREPARED STATEMENT

Mr. MCCARL. Senator Knowland and members of the committee, I am M. D. McCarl, manager of the port of Redwood City.

As requested by the chairman, a few days ago I filed with the clerk 20 copies of my statement.

Senator KNOWLAND. That statement may be printed in full with your remarks.

(The statement referred to follows:)

STATEMENT OF MERRITT D. MCCARL, MANAGER OF THE PORT OF REDWOOD CITY, CALIF.

Gentlemen, I wish to express to you my sincere appreciation for the opportunity to present to you this statement on behalf of the board of port commissioners of the port of Redwood City and the many people who are interested in the further development of the port.

My name is Merritt D. McCarl. I am the manager of the port of Redwood City, Calif. I have held this position since March 1, 1948. Prior to that time, I was for 21 years traffic manager and assistant port manager of the port of Oakland, Calif.

Prior to my association with the port of Oakland, I was, for 15 years, in the employ of the Commission of Public Docks, Portland, Oreg., serving in various capacities in the accounting, operating, and traffic departments. During the latter years of my employment at Portland, I served in the capacity of traffic manager.

My purpose in presenting this statement to you is to request your full support in arranging for the inclusion in the budget of the current administration and

approval by Congress of the $1 million item for Redwood City Harbor which was included in President Truman's budget for the 1953–54 fiscal year. The funds requested are for the purpose of carrying out a portion of the work involved in the channel improvement projects approved by Congress through the River and Harbor Acts of 1945 (March 2) and 1950.

The fact that the appropriation was requested by the Chief of Engineers (Army) and included in President Truman's budget, being the only one on the Pacific coast, and 1 of 4 in the entire United States for River and Harbor projects (new work) is, I believe, ample evidence of the importance of the project in the eyes of the Army engineers. No doubt the Chief of Army Engineers will present or has already presented ample evidence to fully support and justify his request for the appropriation but I should like to also present the following arguments in support thereof:

1. The existing channel as presently being maintained by the Army engineers at a depth of 27 feet, mean lower low water, and width of 200 feet is entirely inadequate to satisfactorily accommodate the vessels and other watercraft now using the waterway and the commerce passing over such waterway. The existing turning basin is also entirely inadequate to permit of the economical turning of large vessels now serving the port and scheduled to call at the port in the immediate future. Only recently, on April 24, the steamship *Silverbow* while making the turn struck a newly constructed section being added to wharf No. 1 causing considerable damage. When a vessel is at berth at wharf No. 1, particularly at the new section, it will be almost impossible for another vessel scheduled for berth 2 or berth 3 to make the turn and back into her berth without the likelihood of damage to the vessel at berth 1 as well as to the dock. The new addition to wharf No. 1 is for the purpose of enabling the port to accommodate additional vessels and cargo tonnage to result from an anticipated early commencement of intercoastal steamship service on regular schedule.

2. When vessels are at berth at the municipal wharves, it is absolutely impossible for vessels to pass in safety when proceeding to or departing from the bulk-loading facilities of the port (contract between the port and the Leslie Terminal Co.) at the end of the channel as projected along the entire length of the port area by the River and Harbor Act of 1950, where cargo in bulk (salt and other commodities) in enormous volume is handled. The only work toward deepening the channel (1,300-foot extension) and providing a new turning basin at the end of the 1,300-foot extension, which extension and new turning basin are included in the improvement project approved by Congress in 1950, has been performed by the Leslie Salt Co. at an expense to them of approximately $220,000. The expenditure by the Leslie Salt Co. in shore facilities for the handling of salt and other commodities in bulk was well in excess of $400,000. At the present time the port has under way active negotiations with a large manufacturer for the lease on a long-term basis of 15 acres of port property adjacent to the Leslie Terminal and bordering on the proposed new turning basin for the location of a large, modern wallboard plant to cost approximately $6 million. It is contemplated that approximately 200,000 tons of import raw material per year will be brought in by vessels for use at the new plant. The port proposes to build a new wharf at the proposed site, which wharf will be open to use on equal terms by the general public.

3. The expense to vessel operators and shippers caused by the necessity of having to wait for favorable tides at San Bruno Shoals as well as in Redwood Creek plus the inability to navigate the channel in safety except during daylight hours is becoming almost prohibitive. One steamship company alone claims that due to restrictions of shallow water and navigation hazards, their added expense in vessel operation in 1951 amounted to $31,500 and in 1952 to $41,400.

4. Although the port was developed for the economical movement of canned goods dried fruit, and other packaged freight originating at or consumed in the Santa Clara and Salinas Valleys and other producing and consuming areas in the port's tributary territory, as well as for the movement of bulk cargoes, no such packaged freight is presently being shipped through the port by reason of the fact that many steamship companies, because of the unsatisfactory channel conditions, are refusing to send their vessels to the port regardless of the fact that large and valuable cargoes would be available for loading or discharge.

5. During the early part of 1950, the port of Redwood City together with 29 shippers and four chambers of commerce in the South San Francisco Bay area filed a complaint with the Interstate Commerce Commission alleging discrimination by the eastbound intercoastal steamship operators against the port and shippers therefrom on cargo handled by transshipment. On November 30, 1951, the

Commission handed down a decision upholding the position of the port and other complainants and ordered the steamship companies to amend their tariffs prior to March 16, 1952, so as to place the port and shippers therefrom on a parity with other bay ports and shippers therefrom on shipments handled by transshipment. Due to the extremely large volume of canned goods, dried fruit, and other commodities originating in the port's tributary territory which would require the absorption of enormous sums of money by the intercoastal carriers for barging charges, etc., coupled with the fact that due to the unsatisfactory channel conditions vessels could not economically be scheduled to call at the port for direct loading of cargo such as is done at other deep-water ports, the steamship operators decided to comply with the Commission's order by discontinuing a practice which had been in effect for some 40 years—that of handling cargo by transshipment. This placed all intercoastal service at Pacific-coast ports on a direct call basis. When channel conditions are improved, it is expected that all steamship companies operating in the eastbound intercoastal trade will make the port of Redwood City a regular port of call.

6. Statistics of the port for the calendar year 1952 reveal the following:

(*a*) Number of oceangoing vessels entering and departing		129
(*b*) Drafts of vessels:		
17 to 23 feet, inclusive	32	
24 to 27 feet, inclusive	44	
28 to 30 feet, inclusive	53	
(*c*) Number of non-ocean-going watercraft		3,763
(*d*) Total watercraft		3,892
(*e*) Number tons of ocean commerce		964,439
(*f*) Number tons of nonocean commerce		1,798,999
(*g*) Total number tons of commerce		2,763,438

As an example of recent activity, during the period April 8 to 13 (6 days), 4 oceangoing vessels called at the port to load and discharge a total of 39,836 tons of ocean commerce and 7 barges called to discharge a total of 8,086 tons of nonocean commerce, making a total of 11 watercraft handling a total of 47,922 tons of cargo. In addition there were 57 barges using the waterway for the transportation of 23,000 tons of oystershell from the east side of San Francisco Bay to the plant of the Ideal Cement Co. located adjacent to the municipal facilities.

A flow chart of the total tonnage (in short tons, 2,000 pounds) of cargo entering or departing the San Francisco Bay area during the calendar year of 1951 (ocean commerce only) prepared by the Pacific statistical region, South Pacific division, Corps of Engineers, under the direction of Col. P. D. Berrigan, division engineer, reveals the following (percentages added):

Harbor	Oceangoing commerce		Relationship (percent) of Redwood City Harbor tonnage to tonnage of other harbors	
	Total	Outbound only	Total tonnage	Outbound only
San Francisco [1]	2,824,959	1,442,313	27	45
Oakland-Alameda [1]	2,662,079	1,253,961	29	52
Stockton	409,030	396,176	188	164
Richmond	8,585,829	3,835,951	9	17
Redwood City	767,746	651,185		

[1] Figures include cargo transshipped from Sacramento and Stockton.

7. During the recent past, vessels in the European trade have started calling at the port. To date 4,300 tons of cargo have been loaded, which cargo had a valuation of approximately $500,000. Vessels in the European trade are now expected to call quite regularly and to call on regular schedule when channel conditions are improved.

8. During the recent past, Examiner McCloud of the Interstate Commerce Commission, who conducted the hearings in the Trader Line case involving an application (docket W–1019) of an association of steamship interests (West Coast

Trans-Oceanic Steamship Co., Portland, Oreg.; General Steamship Corp., San Francisco, Calif.; and Dichmann, Wright & Pugh of New York) to engage, insofar as eastbound service is concerned, in the transportation of lumber from Pacific Northwest ports and general cargo from the port of Redwood City (only loading port in California for general cargo), recommended that authority to engage in such service be granted. It is expected that vessels of the line will commence service from the port of Redwood City within a reasonably short time, with a biweekly schedule. Other intercoastal operators are expected to meet the competition of the Trader Line and likewise serve the port on regular schedule. With establishment of intercoastal steamship service, it is expected that between 150,000 and 200,000 tons of packaged freight will be handled in the intercoastal trade route alone. Service in other trade routes will greatly add to this figure.

9. Commodities now handled at the port include several which are usedi n large volume in the making of defense materials and in the construction of Government projects. Some of the commodites are cement, gypsum rock, salt, and petroleum products. Many other commodities to be handled in large volume will be added when channel conditions are improved and steamship service in various trade routes is established. Some of the projects referred to above are located in the Hawaiian Islands, Alaska, and the Pacific Northwest.

10. The approval by Congress of the requested appropriation of $1,000,000 for Redwood City Harbor, as included in President Truman's budget, is strongly urged by many large important groups in the entire San Francisco Bay area as well as elsewhere, as evidenced by communications forwarded to various Senators and Congressmen. Some of the parties referred to are as follows:

(*a*) San Francisco Bay Area Council, comprising nine counties bordering on San Francisco Bay
(*b*) Shipowners' Association of the Pacific Coast
(*c*) San Jose Chamber of Commerce
(*d*) Santa Clara Chamber of Commerce
(*e*) Sunnyvale Chamber of Commerce
(*f*) San Mateo Chamber of Commerce
(*g*) Redwood City Chamber of Commerce
(*h*) Board of Port Commissioners of the Port of Redwood City
(*i*) Permanente Cement Co.
(*j*) Ideal Cement Co.
(*k*) Leslie Salt Co.
(*l*) Hooker Electrochemical Co., Tacoma, Wash.
(*m*) Pennsylvania Salt Co. of Washington.

House Document No. 104, 81st Congress, 1st session, shows that according to a survey of the Army engineers, the tributary area of the port of Redwood City comprises the major portion of San Mateo, Santa Clara, Santa Cruz, and San Benito Counties. These counties contain a very large population; many, many acres of fruit orchards, berry, vegetable, and dairy farms; numerous fruit-packing and processing plants; manufacturing plants and industries, both heavy and light, a large number of which are engaged in the manufacture and production of products and goods highly essential to the national defense, etc. All of the numerous interests located within the port's tributary area as well as many located outside of such area are very vitally concerned with the approval by Congress of the item under consideration for Redwood City Harbor.

On behalf of the Board of Port Commissioners of the Port of Redwood City and all of the interests referred to above, I sincerely request and strongly urge that your committee do everything in its power to have the $1,000,000 item which was in President Truman's budget for Redwood City Harbor under the heading of "Transportation and communication" included in the budget of the present administration and work for its approval at this session of Congress.

PERMANENTE STEAMSHIP CORP.

OAKLAND, CALIF.

STEAMSHIP "PERMANENTE SILVERBOW,"
VOYAGE NO. 143,
Redwood City, Calif., May 8, 1953.

Mr. M. D. MCCARL,
Port Manager, Redwood City, Calif.

DEAR MR. MCCARL: In regards to your question of my opinion of the port of Redwood from the point of piloting in and out of this port, allow me to state that the channel and port are not adequate for the size of the vessels using same.

This vessel is of 455-foot length and 63-foot beam, loaded draft of 29 feet. I have been here for 3½ years and do my own piloting. The channel is too narrow for a vessel of this size; other vessels, even barges, cannot be passed in the channel unless one or the other with light draft will get out of the channel. Two vessels of our size cannot pass even with light draft. This location has a prevailing westerly breeze, which blows across the channel and docks. When in light load condition, it is most difficult to keep in the channel with this prevailing breeze as the channel is so narrow there is no room to allow for pointing into the wind to offset the vessel's drift. Further, the channel is only marked by spar buoys and cannot be run at night.

Just yesterday came off the entrance to Redwood Creek, westerly wind about force five blowing; it was impossible to proceed into the creek with safety, making it necessary to anchor out for the night and come in this morning when the wind died, due to the narrowness of the channel for vessel of this size.

Another very bad feature of the port is the fact that the turning basin is east of the docks. Due to the restricted depth of water, it is very difficult to turn in the basin with a loaded ship, so it is the practice to turn when light and dock headed out. However, the present location of the turning basin is such that after turning the vessel must be backed to the berth, and with the prevailing wind condition here that is difficult. The turning basin would be better located at the inner end of the port, allowing for a turnaround in either case that would permit vessel to dock coming ahead for a landing.

Also, the present turning basin is not large enough for large vessels.

Another problem, which affects our cost of operation, is the lack of water for our draft. Loaded may only sail with high water. With high water have enough for 29-foot draft, but the channel is so narrow the problem is to make the turns without striking the banks. Also, due to the restricted width, the effects of side suction and pressure, due to the proximity of the banks, are very much felt on the ship. Ordinarily, we have to carry hard right rudder all the way from buoy 15 to buoy 9 as the vessel sheers so hard into the north bank of the channel.

Another bad feature of this port is the fact that when leaving here on high water, time must be figured to also make San Bruno Shoal with good water. With our speed we generally leave here 1 hour before high water which gets us on San Bruno Shoal about 1 hour after high water.

I suppose that the Permanente Co. has informed you of the expense of operating into this port due to loss of time waiting for tide, daylight, etc. It appears that the port presently is just not adequate for the size of the shipping using the port. As you know, every time a vessel proceeds to the Leslie salt dock, or comes from there, we have to stop loading and haul ship ahead about 100 feet to allow the other vessel to pass by our stern. The *Silverbow* has already been struck by an oil barge being towed past the stern due to the narrowness of the channel.

I understand that it is contemplated to expand the port facilities such as docks, warehouses, etc. Personally, I think it would be useless without first making an adequate channel and turning basin for deepwater shipping.

Very truly yours.

JOHN M. O'BRIEN,
Master, Steamship "Permanente Silverbow."

PROJECT LOCATION

Mr. MCCARL. Just to familiarize the committee a little bit with the location of the port of Redwood City, I have here a flow chart prepared by the division engineer of California showing the San Francisco Bay District and showing at the location here just inside the Golden Gate the port of San Francisco and Oakland Harbor immediately east, Richmond Harbor to the north, and then going up to Sacramento and San Joaquin River showing the port of Stockton on the San Joaquin River [indicating].

The port of Redwood City is the most southerly deep-water port in the area, and farther south the Santa Clara, Monterey, and Salinas Valleys and so forth.

This is a map [indicating] of the outer channel leading to Redwood City Harbor a distance of about 2½ miles and the channel is maintained to a width of about 200 feet, 27-foot depth at the present time.

This is a map of the inner channel which will give you an idea of the problem we have. The port facilities are located at this point right here, and the existing turning basin is just below the facilities. It is 700 feet in width and 1,800 feet in length. At the upper end of the channel is the Leslie Terminal where tremendous quantities of salt are shipped from.

PORT FACILITIES

This is a perspective of the port facilities. We have 4 berths for oceangoing vessles at the present time and 1 for barges. The turning basin is here, and this is the berths, Nos. 1, 2, and 3, and off to the side is the fourth berth. We have quite an expansion program planned, part of which is under way at the present time.

This is just one more map [indicating]. This is the port area where Leslie Terminal is shown up here at the inner portion, and we are carrying on negotiations at the present time for a long-term lease of 15 acres of port property on which to locate a gypsum board manufacturing plant to cost in the neighborhood of $6 million.

PRESENT CHANNEL DEPTH

Senator KNOWLAND. What depth do you have there?

Mr. MCCARL. At the present time the channel is 27 feet in depth, 150 feet in width, and the only work on that inner portion of the channel has been performed by the Leslie Salt Co. at a cost of $220,000. The Government project is for a 1,300-foot extension to the existing deep water channel and a new turning basin which project was approved by Congress in 1950, but no work has been done on that project as yet.

You gentlemen are aware of course of the fact that there was an item of $1 million for improvements to Redwood City Harbor in the Truman budget.

Senator ELLENDER. Was that excluded in the revision of the Truman budget?

Mr. MCCARL. It was included in the Truman budget.

Senator ELLENDER. I say, it was excluded from the revised budget?

REVISED BUDGET

Mr. MCCARL. In the revised budget it has been excluded, yes, sir. I assume the request for the $1 million appropriation was made by the Army engineers. It was apparently made because the engineers recognized the dire need for improvements to be made in the existing channel and turning basin if the port is to continue to operate and handle just the commerce presently handled, in safety.

There is a strong possibility of a real catastrophe occurring if something is not done because of the nature of the commodities handled, a tremendous amount of gasoline being handled along with other commodities.

I believe Colonel Milne is present along with other Army engineers. I would like to have him state for the record the request of the Army engineers and why they so recommended.

Senator KNOWLAND. The Colonel is not present.

Mr. MCCARL. I understood he was to be present.

Senator KNOWLAND. The Army engineers are present and we will request the engineers to furnish us with a statement on the Redwood Harbor project.

Mr. MCCARL. Thank you, sir.

General CHORPENING. If you would like a statement on it, Senator Knowland, that was in the original budget. That was one of the items removed at the time we made the revision.

Senator ELLENDER. Why was it removed?

CLASSED AS NEW START

General CHORPENING. It was considered to be a new start.

Senator ELLENDER. A new start?

General CHORPENING. Yes, sir.

Senator ELLENDER. Is it?

General CHORPENING. Yes, sir, it is. There is a harbor there, it is true, but this would be work under a new authorization.

Senator ELLENDER. When was that authorization made?

General CHORPENING. 1950.

(The following notation was supplied:)

(NOTE.—One project in 1945 and a second in 1950.)

INCLUSION IN BUDGET REQUESTED

Mr. MCCARL. My purpose in being here today is to request that this committee strongly recommend the inclusion in the present administration's budget of the item for improvements to Redwood City Harbor as recommended by the Army engineers and that you will use your utmost influence to have the item approved by the present Congress.

Although the project is referred to as new work, it really only involves badly needed improvements to the existing channel and turning basin. The channel and turning basin as presently maintained are entirely inadequate to take care of the present shipping, let alone the greatly increased business expected to develop in the immediate future.

Only recently, on April 24, the steamship *Silverbow*, while turning in the basin, damaged an extension which is under construction to wharf No. 1, doing considerable damage. When the wharf extension is completed and a vessel is at berth at berth No. 1, it is going to be extremely difficult for a vessel to turn and back into her position at berth Nos. 2 and 3. Last Friday, on May 7, the same vessel, because of a 19-mile-an-hour wind, had to anchor out in the bay only 2½ miles from her berth because the captain was afraid to enter the narrow channel, and the vessel consequently lost about a day in sailing time.

EXPENSE TO VESSEL OPERATORS AND SHIPPERS

The expense to the vessel operators and shippers, because of the lost time due to vessels having to wait for favorable tides in the channel and at San Bruno Shoals, which is about 9 miles from Redwood City, is becoming almost prohibitive. During the last 2 years, 1 steam-

ship company alone claims that it cost them $73,000 on account of delays.

Senator ELLENDER. To what extent is this port used in our present defense effort?

Mr. MCCARL. I am getting to that in a moment, sir.

Senator ELLENDER. That might be the way by which you might get this thing done.

Mr. MCCARL. It is most essential from that standpoint.

Last year almost 4,000 watercraft used the waterway, handling nearly 3 million tons of cargo. This includes 129 oceangoing vessels handling nearly 1 million tons of oceangoing commerce. Over 50 of the vessels had a draft of between 28 and 30 feet when loaded. As an example of recent activity, during the 6-day period from April 8 to 13, there were 68 watercraft in the harbor handling in excess of 70,000 tons of cargo.

In 1951, according to a flow chart prepared by the division engineer for ocean commerce in the San Francisco Bay area, on outbound ocean commerce alone, Redwood City handled nearly one-half as much as the whole port of San Francisco, over half as much as Oakland and Alameda ports combined, and nearly twice as much as the port of Stockton, which is located about 70 miles inland.

European tonnage is just starting to move from the port. Recently there were 2 vessels carrying tonnage amounting to 4,300 tons with a valuation of approximately $1 million. This is the forerunner of the large movement that is to start for European and oriental destinations.

EUROPEAN CARGOES

Senator ELLENDER. What are the principal cargoes to Europe?

Mr. MCCARL. Magnesite in bulk, and of course a lot of canned goods and fruit will also be lifted when the vessels come in.

Intercoastal service should start shortly. One of the largest and oldest steamship companies in San Francisco, the General Steamship Corp., together with a large company having headquarters in Portland, Oreg., and another large company, Dichmann, Wright & Pugh, with headquarters in New York, made application to the Interstate commerce Commission for a certificate to carry lumber from northwest ports and packaged freight from the port of Redwood City. The port of Redwood City would be the only port in California where they would take on any cargo. The examiner who heard the testimony recommended very strongly that they be given a certificate. Oral argument has just been completed, and we expect a favorable decision from the Interstate Commerce Commission, probably within a matter of 30 days.

VALUE OF TRADER LINE

When the Trader Line gets started, we are sure that the competing lines will also come in and due to the large movement of canned goods and other commodities from the area, we will have service to Europe, South America, and Peurto Rico as well as to intercoastal, European and trans-Pacific destinations.

Senator KNOWLAND. Mr. McCarl, if I might interrupt, unfortunately we are operating under a time schedule.

Mr. MCCARL. I have just a few minutes to go.

The wharf extensions are nearly complete, and we have plans and specifications under way for the enlargement of the transit sheds. These projects were started when the item for Redwood City was in the budget.

AID TO DEFENSE EFFORT

From the defense standpoint, we are already handling a large number of commodities such as cement for Government projects in large quantities, half a million tons being shipped last year, to Hawaii, Alaska, and the Pacific Northwest.

Gypsum rock is handled in large quantities, between 100,000 and 200,000 tons a year. It goes into the making of wallboard as well as cement and some of the wallboard also goes into Alaska and other projects.

The salt, which amounted to about 400,000 tons last year, is expected to be increased to 600,000 tons this year and it will keep stepping up year by year. Salt is used in many, many commodities in national defense, including atomic energy, water purification, sewage-disposal plants, and so forth.

In connection with petroleum products, large amounts go to Moffit Field and also many heavy lifts are handled which are too large to move over the highways, wind vanes, airplanes, etc.

In World War II, the port was used extensively for handling lend-lease cargo and by the Navy for handling petroleum products. Included in the activity in the waterway last year were 343 large barges handling nearly half a million tons of gasoline in bulk—practically one large bargeload a day. Gentlemen, I shudder to think what might happen every time I see the gasoline barges trying to dodge the large vessels and other watercraft. It is hazardous to have these large oceangoing vessels trying to turn around and get into berths 2 or 3 when a gasoline barge is berthed in berth 1.

When the extension to berth 1 is completed and a large vessel is docked there, I do not know how other vessels will get by in order to get into berths 2 and 3.

CHANNEL WIDENING REQUESTED

If, due to extreme urgency of curtailing appropriations at this session, it is not considered expedient to allocate the full $1 million as requested by the Army engineers, I beg of you gentlemen to do everything possible to have appropriated at this session of Congress a sufficient amount, as determined by the Army engineers to be the minimum required, to enlarge the present turning basin and widen the channel sufficiently to enable vessels, gasoline barges, and other water craft to enter, depart, and load and discharge their cargoes in safety; and thus avoid the possibility of a catastrophe, which could easily result in heavy loss of life and enormous property damage, which, amongst other things, might be very detrimental to the national defense.

Gentlemen, the situation at Redwood City is critical; yes; it's very dangerous. I feel there is a definite obligation on the part of the Federal Government to remedy the situation, and something shouldbe done about it at this session of Congress. Your help is earnestly solicited. Thank you.

Senator KNOWLAND. Thank you very much.

Mr. MCCARL. Congressman Younger is here, Mr. Chairman. He would like to make a short statement.

Senator KNOWLAND. Congressman Younger?

STATEMENT OF HON. J. ARTHUR YOUNGER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

PREPARED STATEMENTS

Representative YOUNGER. Mr. Chairman and Senators, I just want to introduce 2 statements: 1 from Congressman Gubser from the 10th District and 1 of my own.

Senator KNOWLAND. They may both be printed in full.

(The statements referred to follow:)

STATEMENT BY CONGRESSMAN CHARLES S. GUBSER OF CALIFORNIA REGARDING BUDGET FOR PORT OF REDWOOD CITY, CALIF.

Mr. Chairman and members of the committee, I am here to request the inclusion in the budget of a $1 million item for Redwood City Harbor which was included in the original budget presented for the 1953–54 fiscal year.

I concur completely in the statement filed with your committee by Mr. M. D. McCarl, manager of the port of Redwood City. Mr. McCarl in his statement clearly shows where the present port facilities are inadequate, and are definitely in need of improvement.

I am particularly interested in this improvement because the facilities of the port of Redwood City are used by industry in my congressional district and would be used a great deal more if the port was improved.

In my files I have letters from the chambers of commerce of the cities of Santa Clara, Sunnyvale, and San Jose. I have a letter from the president of the California Prune & Apricot Growers Association; all of these letters advocate that the million-dollar item be included.

The development of this port would be very beneficial to dried-fruit and canned-goods shippers of central California in that it will reduce their transportation costs and expedite the handling of their shipments. It is estimated that the canning industry along with the dried-fruit industry normally ships approximately 200,000 tons of canned goods or dried fruit intercoastally to Atlantic ports. At the present time it is necessary for those shippers to have shipments transported from their Santa Clara Valley plants to a dock at San Francisco, Oakland, or Alameda. This involves a truck haul of approximately 50 miles and considerable congestion is encountered at such docks.

If our shippers were permitted to make intercoastal shipments via the port of Redwood City, they would have a truck haul of only 29 miles which would result in a saving of 21 miles. Moreover, the congestion presently encountered at San Francisco and East Bay docks would be eliminated by using the port of Redwood City. The use of Redwood City would result in a saving to our valley shippers of approximately 75 cents per ton in transportation charges to the dock. In addition, the shorter distance to Redwood City and the freedom from congestion would result in faster turnabout of the trucks and would thus enable them to adjust their plant operations to effect further economies.

I believe there is another point that has not been given due emphasis and that is the matter of adequate port facilities in the event of a national emergency such as war or some other catastrophe. Certainly it is important that we have as many port facilities available in such an event as possible. Undoubtedly in event of war, concentration of enemy bombers would be in the vicinity of the bay area proper and the Port of Redwood City would provide another means of transportation by water.

In addition to the dried fruit and canned goods shipments, the port is being used by the Permanente Cement Co., which has its main plant in my district, for the shipment of cement.

If one of the cement ships should be grounded or otherwise damaged through the present hazardous condition of the channel, this would be disastrous to the

movement of a vital defense cargo, since there are no other such specialized ships available.

This company was established some 13 years ago to meet increasing cement demands in northern California. Through the years Permanente has greatly increased its capacity to where it is one of the largest cement plants in the world. Its annual production capacity is now 7,000,000 barrels, with a plant payroll of $2.2 million annually and plant employment of 550 workers.

The company is the largest user of the Port of Redwood City facilities. During 1952, approximately 2,800,000 barrels were shipped through the port by its 2 oceangoing vessels, the steamship *Permanente Silverbow* and the steamship *Permanente Cement*. The company expects that shipments will continue to increase in the future.

Approximately 50 percent of the company's 1952 movement of cement out of Redwood City went to Federal projects or other types of construction on the west coast, in Alaska, and the Pacific Ocean area, including Hawaii, which are a direct part of the defense buildup. For example, 280,000 barrels were transported to military construction in Alaska.

Incidentally, because of Permanente's unique and efficient bulk loading and discharge method, the cement is laid down in Alaska (Anchorage) at a 25 percent saving to the Government below that of the cost of the old practice of packaged cement.

The present channel and harbor at Redwood City are wholly inadequate for deep draft vessels in a loaded condition. The harbor situation requires movement of these vessels during high tide only. Also, the channel is too narrow to allow a movement of the vessels during darkness. This means that considerable loss of time occurs while the vessels wait for tide and daylight to sail, often with a military assigned cargo. Another delaying factor is that under present channel conditions when ships are loading or unloading, the existing channel is blocked for movement of other vessels.

To summarize, may I respectfully offer that present industry in Santa Clara County justifies improvement of the Port of Redwood City. The predicted expansion of production in the area renders this improvement a necessity. It is predicted that the City of San Jose will within 10 years be the hub of a solid metropolitan area ranging from the Golden Gate on the northwest, south to San Jose and to Richmond, Calif., on the northeast. Santa Clara County is increasing industrially at a rate not equaled by any other section of California. I believe it is wrong for this area to be tied for its shipping outlet to San Francisco and Oakland where dock facilities are inaccessible and expansion is expensive if not impossible.

May I express my sincere appreciation for the opportunity of presenting this statement to the committee.

STATEMENT OF HON. J. ARTHUR YOUNGER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman and Members, my name is J. Arthur Younger and I represent the 9th Congressional District of California comprising San Mateo County in which is located Redwood City.

Traditionally this Redwood City Harbor project is one for Federal consideration and not a development to be paid for by the State or local taxpayers. This is not a new project as it has been approved by the Corps of Engineers years ago and considerable Federal money was spent in the initial development.

There are two parts in the request for the $1 million appropriation:

1. The widening, straightening, and deepening of the channel.

2. Providing for a new turning basin and the enlarging of the existing turning basin.

Both of these projects are needed for the safety of commerce because it is impossible at the present time for ships to pass in the present turning basin and there is often a conflict of right-of-way as between gasoline barges and oceangoing ships. It may be that sometime we will have a serious accident due to the lack of facilities for passing.

Our county needs this port development, because we have had an unusual growth in population increasing from 115,250 to 250,000 in 10 years. This placed an unusual burden on our school system and as we are primarily a residential county the tax base has not kept pace with the need for money for the school system and we must develop manufacturing establishments to increase this tax base.

If this port is improved we are assured of one new industry, the Gypsum plant which will lease 15 acres of the port property and put in a $6 million plant which will, of course, bring other allied industries with it.

This is essentially a bulk-cargo port at the present time handling bulk salt, cement, and gypsum. It is also designed to handle the shipment of canned good and dried fruits. The latter item comes from nearby Santa Clara County and shipping these products from Redwood City makes it unnecessary to truck them on in to Oakland or to San Francisco thus cluttering up the highways.

This improvement is strongly recommended by the Corps of Engineers and I recently asked the Appropriations Committee of the Senate to approve this million dollar appropriation.

GENERAL STATEMENT

Representative YOUNGER. I want to make one observation in regard to our county. In the last 10 years our county has grown from 115,000 to 250,000 population. It has put a tremendous school burden on us. We have grown from a rich school district to a poor school district. We are now in the process of trying to enlarge the tax base with industries. This is one of the things that will bring us industries.

In connection with this we have a $6 million gypsum plant which will come in immediately. We need this development very much.

Senator KNOWLAND. Thank you, Congressman.

Representative YOUNGER. Thank you, gentlemen.

Senator KNOWLAND. Next we have Mr. Frazer A. Bailey.

NATIONAL FEDERATION OF AMERICAN SHIPPING

STATEMENT OF FRAZER A. BAILEY, PRESIDENT

PREPARED STATEMENTS

Mr. BAILEY. Mr. Chairman and gentlemen of the committee, I will be very brief. My name is Frazer A. Bailey, and I am president of the National Federation of American Shipping, which represents the majority of all deep-water shipping under the American flag. We represent practically all of those lines on the Pacific coast, and we particularly represent the intercoastal lines that I heard the witness testify about starting service into Redwood City. I would like, Mr Chairman, if I may, to file with you two statements for the record and comment upon them briefly.

Senator KNOWLAND. They may be filed in the record at this point.

(The statements referred to follow:)

NATIONAL FEDERATION OF AMERICAN SHIPPING, INC.,
Washington D. C., May 14, 1953.

Re Sacramento, Calif., ship channel.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Appropriations Committee, United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: The undersigned federation which represents a majority of all deep-water American-flag shipping understands that an effort may be made to add to the appropriation bill now pending Federal funds for Army engineer projects "* * * to clean out the flood-control channels at the lower end of the Fourth District, and continue dredging so the spoils may be used to fill in sites where industrial plans are to be located." We understand that the estimated requirement is 3½ to 4 million dollars during 12 months beginning July 1.

This federation represents nearly all deep-water lines which serve the Pacific coast. We favor everything which is beneficial to waterborne commerce and

to the State of California. We do not believe, however, that the Sacramento deep-water channel is necessary or justified at this time.

Briefly our opposition is based upon the following primary points:

1. There is already a deep-water terminal at Stockton, Calif., only 40 miles distant from the proposed Sacramento terminal.

2. There exist in San Francisco Bay at least four major ports and many lesser terminal facilities which can easily serve in conjunction with Stockton all of the traffic generated in the Sacramento area. Their facilities can accommodate all of the traffic which it is estimated will be developed in this general area for many years to come.

3. The Pacific coastwise and United States intercoastal trades are reduced to less than half of their former and prewar size. There appears no need at present to provide additional terminal facilities in the San Francisco or Sacramento Valley area. Creating another port and diverting traffic merely spreads the same traffic thinner.

4. While recognizing that Congress has approved the Sacramento project, we suggest that there is no urgency justifying the expenditure of substantial Federal funds at this time. Further dilution of traffic available to the existing ports would lessen the incentive for steamer calls at all such terminals.

5. We understand construction costs have substantially risen over the 1945 estimate, and upon bases of 1952 costs, the Army engineers found that the "benefit to cost rates" was less than 1 to 1; and that they did not therefore ask Congress for any money in that year.

For these reasons, we very respectfully suggest that, as far as the steamship interests can see, there is no real need for the appropriation of Federal funds to proceed with projects connected with the Sacramento ship channel at this time.

Yours very truly,

FRAZER A. BAILEY.

NATIONAL FEDERATION OF AMERICAN SHIPPING, INC.,
Washington, D. C., May 11, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Appropriations Committee, United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: The undersigned federation, which represents a majority of all deep-water American-flag shipping is appearing in opposition to the inclusion in the appropriation bill of funds for the purpose of developing a deep-water harbor at Redwood City on San Francisco Bay, Calif.

We would have the committee understand that we are an association of American shipowners. If we believed the development of an additional deep-water harbor on San Francisco Bay would be instrumental in increasing commerce on seagoing vessels, we would be appearing before you as a strong advocate. This is particularly true of the San Francisco Bay area, where many of our member companies are operating shipping services. We are convinced, however, that Federal aid for the development of such a harbor would be a needless expenditure of Government revenues at this time and would not, on an overall basis, prove advantageous either to the area, to waterborne commerce, or to shipping operation, but could prove advantageous only to a few industries in a very limited area surrounding the proposed port, with corresponding disadvantage to the existing ports on San Francisco Bay, and for the following primary reasons:

1. The present port and terminal facilities of San Francisco Bay are more than adequate to handle all of the generated traffic. In fact, it has been estimated by competent authorities that these facilities could handle 50 percent more business than is now available to them.

2. Traffic in the area available for ocean transportation is declining. While there has been some increase in overseas tonnage, the decline since a typical period, 1924–40, has been 49 percent in intercoastal traffic; and 79 percent in coastwise traffic.

3. An increase in port facilities at Redwood City would only dilute the available traffic by spreading it more thinly over a larger area; would not be of substantial benefit to the Redwood City area and would at least correspondingly damage other port areas.

4. The huge wharves and terminal facilities of the great seaport of San Francisco are available; are far below capacity, with probable diminishing volume of traffic. These facilities are only about 20 miles from the proposed deep-water harbor at Redwood City.

5. The provision of terminal facilities in excess of tonnage requirements, or the spreading of a given volume of traffic over a larger number of terminals already far below capacity can only result in an increase in terminal rates and a further burden upon commerce, with a probable further diminution caused by diversion to other modes of transportation.

The bay area terminal facilities have consistently operated at a loss. The deficit for the ports of San Francisco, Oakland, and Richmond combined for a period of 20 years ending in 1950 was more than 2½ million dollars.

Because of change in character of the transportation facilities which deliver commerce to the port areas, namely a large diversion to trucking services, any available funds could be better spent on modernizing the existing port facilities than to leave them in their present state of repair and create new facilities at a point not required.

6. The steamship companies are not anxious to see another port created on San Francisco Bay unless there is a volume of traffic to justify it. The normal procedure in such cases is to meet with shipper demand and port area demand for additional shipping calls, resulting in lengthening of ship schedules, increased operating costs and other inefficiences without increasing the overall volume of business handled. The normal expectancy of such procedure is that shipping rates must be increased to provide the revenue to cover the extra cost.

May we call the committee's attention to our understanding that the proposed appropriation for the development of a deep-water harbor at Redwood City was contingent upon the provision of an equal amout of funds being made available by the community; that a bond election was held at Redwood City and the proposed bond issue for this purpose was defeated on April 7. It is also our undertanding that this is the third time that a proposal to provide part of the funds for such a purpose by the community has been defeated at the polls by the citizens.

The shipping interests which we represent, as we have stated, are anxious to increase waterborne commerce and would be strong advocates of any action which we believe would produce such a result. However, to merely divert traffic where nearby terminal facilities are available, to spread the workload even more thinly, and to increase proportionate terminal costs without generating any additional business, does not, in our opinion, justify the Federal aid requested.

In further substantiation and to provide more detail, we enclose two statements of objections and economic considerations.

Yours very truly,

FRAZER A. BAILEY.

OBJECTIONS TO THE PROPOSED REDWOOD CITY PORT DEVELOPMENT FROM THE VIEWPOINT OF EXISTING BAY AREA PORTS AND TERMINALS

The existing bay area ports and terminals foresee serious detriment to California interstate and foreign commerce in the proposed Redwood City port development for the following reasons:

1. Present port and terminal facilities far exceed the present demands of port commerce. "It is estimated that bay area port facilities have the capacity for 25 to 50 percent more shipping than now flows through the harbor." (1) No new tonnage would be developed simply by the creation of the proposed new port. Thus, the present tonnage would be further divided and all facilities would be operating at a lesser degree of a potential capacity than at present, as noted above. The result of the proposed new general cargo port of Redwood City would be to divert, not originate, tonnage.

2. Bay area facilities have consistently operated at a loss. (For the 20-year period 1931 through 1950 the ports of San Francisco, Oakland, and Richmond operated at a deficiency of $2,672,905—the only years that the total income of the ports was sufficient to cover operating expenses, bond interest, depreciation, etc., were the war years 1942 through 1945. (2))

3. Present ports and terminals are already fighting the problem of declining tonnage and the entry of a new port into the industry would intensify the problem "It has been stated many times that the dry-cargo tonnage moving through San Francisco Bay ports has decreased. The statement is true but it should be qualified by adding that the decline is due to drops in the tonnage moving in the coastwise and intercoastal trades. (3) "The dry-cargo tonnage moving in the intercoastal trade dropped from a 1925–40 average of 2,012,000 tons to 1,027,000 tons in 1949. The net decline was almost a million tons and the percentage of decrease was 49 percent. Coastwise tonnage in dry-cargo dropped even more

drastically from a 1925–40 level computed to be 2,200,000 tons, it fell to 473,000 tons in 1949. Percentagewise the decline was over 79 percent." (4) There is no indication that there will be any change in the indicated downward trend.

4. Present ports and terminals are already fighting the problem of diminishing revenues. (Costs are increasing more rapidly than revenues in spite of increased rates. (5)) The diffusion of tonnage that would result from the creation of a new port would further aggravate an already serious problem.

5. An increase in port facilities without a corresponding increase in cargo tonnage can only result in higher rates, heavier financial losses or a curtailment of ports and terminal services. It is not proper to create new port facilities which are built with the inevitable result of increasing rates. Users of port and terminal facilities in the San Francisco Bay area should not be required to pay higher rates to create additional unneeded facilities. Private industry can not exist under such circumstances. Eventually such a course would mean that all port and terminal facilities would require a subsidy either by local, State or Federal taxpayers.

6. There is a serious need for improving present port and terminal facilities. "A substantial percentage of facilities was built prior to the increase in trucking services to the port area; and despite some modernization, many wharves are in need of repair." (6) A program of modernization, improvement, and repair cannot be engaged in if the revenues with which the necessary expenses will be met are not available. Certainly it appears logical that present facilities should be improved and repaired rather than to build new unneeded facilities.

7. The expenditure of additional Federal funds to improve the channel and harbor of the port of Redwood City will later be used by Redwood City and other ports as an argument before the Interstate Commerce Commission or other regulatory bodies to justify extension of steamship services to the detriment of present ports and terminals.

8. New ports in the San Francisco Bay area will increase steamship companies' operating expenses as a result of their having to call at additional ports. This, in turn, will cause further curtailment of steamship services with a resultant need for increased terminal rates to meet increasing costs.

The overall problem of the present bay area ports and terminals is summarized beginning on page 70 of part I of the report of the Senate Fact Finding Committee on San Francisco Bay Ports, Outlook for Revenues and Expenses. Certain trends or developments in port finances are evident from a study of the record of the past 20 years. These trends are of basic importance, and, if they should continue uninterrupted for another 5 years, they will place the public ports of San Francisco Bay in a precarious financial position. These trends are as follows:

1. Declining dry-cargo tonnage
2. Increasing rates
3. Increasing operating expenses
4. Decreasing net revenue, or, to be more correct, increasing deficits
5. Increasing demands for capital expenditures

A few moments' study of these points will disclose that they are self-contributory to some extent. When a legitimate increase in operating costs has occurred, rates can usually be increased accordingly with little or no reduction in volume. *However, a rate increase to offset reduced volume will usually result only in a still greater* reduction in volume, so that the end is worse than the beginning." [Emphasis supplied.]

The following references are made to the report of the Senate Fact Finding Committee on San Francisco Ports:

(1) Part I, page 15.
(2) Part I, page 31.
(3) Part II, page 22.
(4) Part II, pages 22 and 24.
(5) Part I, page 32.
(6) Part I, page 15.

Some Economic Considerations Concerning the Port of Redwood City

If Congress appropriates money for improving the port of Redwood City, Government money thus appropriated will compete with Government money already spent and now being spent in other bay area port improvements. This us uneconomical and wasteful, because no new traffic would be created by improving the port of Redwood City, the net effect being, if such improvements were made, to dilute existing traffic through existing ports, because some shifting of traffic would occur in favor of Redwood City.

Testimony before the ICC on Docket W–1019, July 1952, indicates that there would be approximately 1,000 tons of cargo moving through the port of Redwood City approximately every 2 weeks, and experts testified that revenue gained by the port from this cargo would be insufficient to pay for the costs of operating the harbor, which means that additional funds—Federal, State, or local—would be necessary to offset losses incurred.

Some shifting of cargo would take place in favor of Redwood City and, as a result, facilities in San Francisco, Oakland, and Alameda would be used less than they are today and part one, page 15 of the 1951 report of the California Senate Fact Finding Committee on San Francisco Bay Ports states that present "total harbor facilities far exceed the present demands of port commerce. It is estimated that bay port facilities have the capacity for 25 to 50 percent more shipping than now flows through the harbor."

Other types of utility for a larger port of Redwood City are difficult to visualize. No suggestion has been made of its value for national defense, flood control, or electrical power.

Development of the port of Redwood City is not recommended from the standpoint of economic water transport. There are now seven separate ports in the bay area at which vessels from all world ports are required to make calls for cargoes. A further dilution or scattering of cargoes would simply add to cargo costs. The out-of-pocket expenses in shifting a typical merchant ship from a major bay area port to Redwood City and return is about $1,200. In addition to that, lost vessel time and extra labor costs must be considered. A C–3 type vessel, in common use today, costs $150 per hour standing idle, according to latest Maritime Administration estimates. With 4 hours consumed each way in a shift to Redwood City, plus port time there, another $1,500 to $1,750 cost is added. Labor agreements, calling for special premium pay when crewmen must turn to in port to shift a ship would add another $250, more or less.

Navigational hazards add to the problem. Tule fogs are much thicker in the southern end of the bay than elsewhere. The San Mateo Bridge (which must be underpassed) has a very narrow opening through which a ship must pass when the bridge is raised. The channel is poorly marked and poorly lighted and will not handle a large amount of traffic without improvements being made. Over-the-water high tension wires in the area are very low, as indicated by the fact that in January 1953 a ship's mast pulled down some electrical wires and darkened communities at waterside for several hours while repairs were being made.

In addition to the above navigational problems and expenses, current ship sailing schedules would be seriously interfered with by the delay involved in moving to Redwood City for cargo, the revenue from which would probably not pay the expenses involved.

SAN FRANCISCO BAY FACILITIES

Mr. BAILEY. No. 1, we are ship owners and ship operators. Anything which would tend to develop ocean commerce we would be very much in favor of. We would be here as strong advocates of any project which would increase commerce, speed domestic and foreign commerce particularly in California where we have many companies. But the present facilities in the San Francisco Bar area are more than ample to take care of all the business that is being generated in that area.

PRESENT OPERATING CAPACITY

There is within 21 miles of Redwood City the ports of Oakland and Alameda. The port of Richmond is 27 miles away, Stockton is 97 miles away. There is not sufficient business to occupy the present existing facilities, we are very sorry to say. We wish there were more business. They are operating today within that same area at about 50 percent of capacity. There has been a decline of 49 percent in the intercoastal trade since the average of 1924 to 1940.

The intercoastal trade today is in a very serious condition from an economic standpoint. Studies are being made by the lines, by

the Department of Commerce, otherwise, to find ways to rehabilitate that service, but we have not found it yet, we are sorry to say.

NO JUSTIFICATION FOR ADDITIONAL FACILITIES

The coastwise service on the Pacific coast is at a 79 percent decline from the average of 1924 to 1940. Under these conditions and inasmuch as the project at Redwood City, in our opinion—and we are speaking only as ship operators; we do not claim to know anything about matters in other areas—there is no justification there at the present time for additional facilities within that limited area.

The only thing that could possibly happen would be the diversion of existing traffic to spread it over the existing facilities plus Redwood City with a thinner spread of traffic and a more difficult economic time. Bay area terminals are operating at a loss today. If we have money spent, we would rather see it spent on improving the additional facilities. The $1 million item which was referred to a moment ago was included, as we understand it, in the so-called Truman budget. We understand it was in there on a basis of locality matching the $1 million appropriation. There was a bond issue, so I am informed, at Redwood on April 7, and the bond issue did not carry.

Further, the item has been deleted from the existing revised budget.

SACRAMENTO SHIP CHANNEL

Now the second item I would like to refer to is the question of the Sacramento ship channel, and we feel very much the same way with respect to the building at a great expense of a ship channel to Sacramento. Since the original budget, original estimates were compiled, we are informed that there has been a very great increase from 1945, the date of the estimate, to 1952. The Army engineers report states that the ratio of advantage to cost is less than 1 to 1, and the Army engineers, we are informed, are presently making another survey and report. Therefore, certainly doubt exists as to whether or not it is a justifiable expenditure. The traffic volume in the whole area is low, and we submit to the committee as far as our knowledge of the shipowners and operators is concerned that there is no urgent need at this time of expenditure of Federal funds on either of these projects.

That is all that I have to say, sir.

Senator KNOWLAND. Thank you very much.

Mr. BAILEY. Thank you, gentlemen.

Senator KNOWLAND. Next we have Mr. W. G. Stone, port director, Sacramento-Yolo Port District.

NO FUND-MATCHING REQUIREMENT

Mr. MCCARL. I would just like to correct one or two statements made by Mr. Bailey. There was no requirement on the part of the Federal Government that the million dollars for Redwood City be matched by a like sum from the local area, and the election, recent election at Redwood City was really a mandate from the people to carry on because it was 62 percent favorable vote against 38 percent unfavorable.

Senator KNOWLAND. Just lacked the two-thirds vote?

Mr. McCarl. It required two-thirds vote, and it just lost by 214 votes, and we have sufficient funds, and we are going ahead with our enlargement program. Mr. Bailey does not of course represent by any means the steamship people because there are many who want to extend their boats to Redwood City and pick up the cargoes.

Mr. Bailey. May I file the statements for the record?

Senator Knowland. Yes, I believe they have gone in.

Mr. Bailey. It was contingent upon the matching by local funds.

Senator Knowland. We apparently have a conflict of testimony.

Senator Knowland. Mr. Stone?

SACRAMENTO-YOLO PORT DISTRICT, CALIF.

STATEMENT OF W. G. STONE, PORT DIRECTOR

ACCELERATED CONSTRUCTION URGED

Mr. Stone. Senator Knowland and members of the committee, my name is W. G. Stone, and I am port director of the Sacramento-Yolo port district.

First of all I wish to express appreciation for the splendid spirit of cooperation we have had from this committee in the past, in making its first appropriation for the construction of our project in 1948. It was at that time set up on a construction timetable of 4 years. Three appropriations have been made, and construction was started in 1949. Had the 4-year construction timetable been maintained the project would be practically complete at this time.

The local interests responded in accordance with the act of authorization which was made in 1946 by promptly creating the port district and gave the Government the assurance required by the act of authorization, namely, that the local interests would meet their obligations. The State of California promptly approved and endorsed the project, and as an indication of the interest of the State of California, there was appropriated $750,000. The project, as I have indicated, has been slowed down due to the Korean situation, and it is behind schedule. Our purpose in appearing here today is to urge an accelerated construction so that this project may be completed at an early date.

I have with me my chairman, Frank A. Lawrence, who has a brief statement to file for the record.

Senator Knowland. Mr. Lawrence?

SACRAMENTO-YOLO PORT DISTRICT COMMISSION, CALIF.

STATEMENT OF FRANK A. LAWRENCE, CHAIRMAN

PREPARED STATEMENT

Mr. Lawrence. Mr. Chairman and members of the committee, I have a brief statement and a copy of a telegram received from the Dredging Contractors Association of California which I would like to submit for the record.

Senator Knowland. That will be done.

(The statement referred to follows:)

STATEMENT OF FRANK A. LAWRENCE, CHAIRMAN SACRAMENTO-YOLO PORT DISTRICT COMMISSION

My name is Frank A. Lawrence, Sacramento, Calif. I am chairman of our port district commission and I have been a member of the commission since its inception May 19, 1947.

Our port district commission has met each and every obligation to the Federal and State Governments and to the voters who created our port district.

In an effort to quickly start and speed up the initial construction, our port district loaned the Federal Government $500,000 of our bond money early in 1949 after approval of this procedure by the courts. It was accepted by the Secretary of the Army. Three-hundred thousand dollars has been repaid the port district, leaving $200,000 not yet returned.

Our port director, Mr. W. G. Stone, and our legal counsel are in negotiation with six major industrial firms desiring location in our port district terminal area provided we can show progress in construction of the channel by the Federal Government. The deep-water channel is necessary for use of these tonnage-producing industries. It is essential therefore that an appropriation be made at this time for dredging. Construction was started in 1949 and was proceeding nicely until the Korean situation retarded construction due to use of critical materials in the barge canal lock.

Seven million yards of material has been moved leaving about 70 million yards in deepening and widening of waterways to be dredged and moved a distance of about 1,500 to 2,000 feet. We are reliably informed that a number of dredgers are idle and available in northern California now and could be placed in operation immediately. I hand you a telegram from the Dredgers Association of California on this subject which speaks for itself. The dredging companies are prepared to do the work.

In concluding, let me say that our local interests have done more than required of them but are being held up in their construction program waiting for the Federal Government to do the dredging and place this material on the spoil disposal areas which will ultimately be the location of our port terminal warehouses and private industrial plants. Every day that this dredging program is delayed hampers our development program. We urge therefore that your honorable committee appropriate the largest amount which the Corps of Engineers can expend for work done during fiscal year 1954.

On behalf of our port district commission I thank you for the opportunity of appearing before you here today and hope we may have your favorable consideration.

MAY 11, 1953.

FRANK A. LAWRENCE,
Sacramento Yolo Port District Commission,
Washington, D. C.

There are presently approximately 17 idle dredges in California including 5 very large ones capable of completing the 70 million yards in the Sacramento deep water channel project within next 2 fiscal years. There are also many unemployed dredgemen available. We urge you to press for an appropriation to carry on this important project immediately to assist an essential industry.

DREDGING CONTRACTORS ASSOCIATION OF CALIFORNIA,
B. G. HINDES, *President.*

Mr. LAWRENCE. I want to leave one thought with you, Senator Knowland and members of the committee, that after you have reviewed our statements and facts and figures therein that you give due consideration to keeping this project alive. I thank you.

Senator KNOWLAND. Thank you very much.

Mr. STONE. I ask, Mr. Chairman, that the statement of the chairman be included in the record.

Senator KNOWLAND. Very well, it will appear in the record in its entirety.

PREPARED STATEMENT

Mr. STONE. Now I have a brief prepared statement of my own which I would like to have filed at this time, and which I will not read.

In addition, I have a resolution of the Sacramento Junior Chamber of Commerce, the West Sacramento District Chamber of Commerce, a resolution of the Yolo County Board of Supervisors, Woodland, Calif., and a resolution of the Greater North Area Chamber of Commerce, of North Sacramento.

I would like to ask that those resolutions also be included in the record.

Senator KNOWLAND. They may go into the record at this point.

(The material referred to follows:)

SACRAMENTO RIVER SHIP CHANNEL PROJECT

Statement of W. G. Stone, port director, Sacramento-Yolo Port District

My name is W. G. Stone. I am port director and general manager of the Sacramento-Yolo Port District, Sacramento, Calif. This port district is a political subdivision of the State of California, consisting of the whole of Sacramento County and supervisorial district No. 1 of Yolo County.

The port district was created to provide the medium for local participation and for the further purpose of construction and operation of adequate deepwater terminal facilities.

The project was authorized by Public Law 525 July 24, 1946. It calls for a deepwater channel 30 feet deep at low tide and 200 feet bottom width and with a connecting shallow draft barge canal at Sacramento between the turning basin and the river 13 feet in depth and about 1½ miles in length. The turning basin will be in Lake Washington about 1½ miles west of the Sacramento River, opposite the city of Sacramento.

This deepwater channel will be 15 miles shorter than the present crooked river route inasmuch as it utilizes a number of connecting waterways and sloughs on the west side of the Sacramento River.

The Sacramento-Yolo Port District was created April 15, 1947, and immediately thereafter prepared preliminary plans and gave the Federal Government an agreement of assurance that the obligation of the local interests would be met. The Secretary of the Army accepted this agreement February 3, 1948.

The State of California by chapter 1152 of 1947 Statutes approved the project and appropriated $750,000 for rights-of-way as an indication of the interest of the State of California in the project.

The first Federal appropriation for construction was made in 1948 and ground was broken August 7, 1949. Since that time, approximately 7 million yards of earth has been moved, levees have been thrown up around the harbor, the barge canal and along the upper 2 miles of the deep water channel. About 4½ miles of the channel has been completed to project depth in the Cache Slough area just north of Rio Vista. The total expenditure for planning, earth moving and dredging by the Federal Government up to June 30, 1952, is $2,428,823.

The port district has purchased 967 acres of farmland for rights-of-way for the channel, barge canal, and harbor and additional easements for the deepwater channel and spoil disposal purposes. The port district has constructed a 500,000 bushel capacity grain elevator 4 miles of belt railroad, 1 mile of highway, a fire protection system, and various other preliminary terminal facilities. The total capital expenditures of the port district up to June 30, 1952, is for rights-of-way and easements $656,886, and for the grain elevator and other port facilities $1,089,244, a total investment of $1,746,130.

The grain elevator has been in use by the belt railroad and highway for almost 3 years. It has been impossible, however, to load any export grain direct to deep-sea vessels or to have any barge transportation to it due to the fact that the Federal Government has not completed its dredging program. The Sacramento River flows through the grain- and rice-producing area for 150 miles but cannot be used to the elevator until the barge canal is completed.

The port district property around the harbor is lowland and is spoil disposal area on which the material to be moved from the deepwater channel, harbor, and

barge canal is to be placed. Local interests are therefore being held up in their construction program, awaiting future Federal dredging.

Local interests have done more than required of them by the act of authorization and are continuing to do so. For example, the State division of highways is building the West Sacramento Freeway just north of the port district property and the industrial subdivision in that area. They are removing about 1 million yards of material out of the deepwater channel and using it for filling purposes on the highway. This is 1 million yards which the Federal Government will not have to dredge.

The State division of highways is constructing an overpass over this freeway, providing Harbor Boulevard entrance to the harbor area and will complete that structure this year. This is being done in anticipation of the Federal Government completing its dredging program at an early date. In other words, local interests are proceeding with their construction just as fast as it is physically possible to do so.

Pointing to a map, I indicate in green where this overpass is being constructed. This map shows an industrial area of 260 acres contiguous to the port district as shown. The port district grain elevator is located in the lower center part of the map. The harbor is shown adjacent to the grain elevator. In the lower right-hand corner of the map is the site of the Farmers' Rice Growers Cooperative, a 9-acre site. This cooperative is an association of 200 farmers and they are spending $1 million in 1953 on a storage facility and drier and will, in 1954, expend an additional $800,000 for a new rice mill and warehouse. They located in this 260-acre industrial tract depending upon completion of the deepwater channel in the near future. More that 75 percent of their outbound shipments are for offshore destination, requiring deep-sea transportation. About half of the site for this plant is at elevation 20, the other half is lowland which is to be filled in by the Federal Government dredging program. The remainder of the tract, except for that particular corner near the southeast corner is all lowland termed "spoil area" and cannot be used for industrial purposes until the spoil material is placed upon it.

Referring to the general map, I call your attention to the location of the deep water channel as compared to the Sacramento River. The deep water channel is 15 miles shorter than the crooked river route. The lower end of the project is both a flood control and a navigation project. Pointing to the map I call your attention to the drainage canals which are to be opened up, widened and straightened and deepened to permit the floodwaters to flow out of the Yolo bypass more rapidly than they do at the present time.

It will take about $1 million to do the necessary dredging in the lower end of the project, in building the navigation levees and in dredging that portion of the channel and in opening up all those floodwater outlets. This $1 million will therefore serve a dual purpose, namely: Flood control as well as navigation.

An additional 2½ or 3 million dollars can be economically expended during the next fiscal year in the upper end of the channel by floating a dredger up to the point where you cut through the Yolo bypass levee and then let the dredger work its way over to the harbor. Spoil material can then be placed on the lowlands previously described and local interests can proceed with construction of their storage warehouses and industrial plans and have this construction under way simultaneously with construction of the deep water channel below.

The port district had developed a long-range construction program starting out with a wharf 1,500 feet in length with 2 transit sheds upon it and ultimately providing for 6 miles of wharves around the turning basin. This entire area will will be served by Harbor Boulevard, the highway previously mentioned and the port district belt railroad, which connects with all railroads serving Sacramento and gives the harbor area a definite national defense aspect. In other words, this harbor could be utilized for the loading of troops and war materials without passing through any congested areas in event of any immediate need in connection with the national defense program. For 20 miles downstream below the deep water turning basin the channel is paralleled by a California State highway and by a branch line of the Sacramento Northern Railway. This provides an ideal inland location for any type of military installation, for national defense plants, or for large industrial concerns. In addition, there are a number of military installations near Sacramento: McClellan Field, Mather Field, the Sacramento Signal Depot and others in the nearby area. Incidentally, this deep water channel for 20 miles below the turning basin is nothing more or less than a still water lake, there being no river current or floodwaters flowing into the channel. It is easy of navigation and one which ships will want to use. At the present time, the

Sacramento Northern Railway trestle crosses this route at Lisbon but is out of commission due to the fact that over 1 mile of the trestle is out. There is a 90 foot steel lift span where the drainage canal crosses the Sacramento Northern. This span was placed in that location so that it can be lifted out and dredgers permitted to pass through.

This would be an opportune time, therefore, for a dredger to pass through this span while the railroad is out of operation. The railway company will be reconstructing this trestle during the next 12 months. Consequently, an appropriation should be made in sufficient volume this year to enable a dredger to pass through this span, thereby avoiding extra and unnecessary expense in getting a dredger up to the harbor area.

On October 1, 1952, intercoastal carriers cancelled terminal rates by transshipment from Sacramento. This places a very heavy burden upon shippers and receivers of freight in that it increases the cost of reaching shipside or removing cargo from shipside to destination. A tributary area of 24 counties in northern California, 4 southern counties in Oregon and all of northern Nevada is affected by this cancellation. The only solution to that problem is early completion of the deep-water channel so that ships may call at Sacramento, bringing in cargo destined to Sacramento and its hinterland and then lifting Sacramento cargo and products of the tributary area.

Local interests are united and wholeheartedly support this project. We even have railway support. Typical of this support is the announcement of the Sacramento Northern Railway that is has just purchased 300 acres of industrial land for location of new factories upon it and that one of the controlling reasons was that the 300 acre site was adjacent to the port district terminal area.

Seven million yards of material have been dredged. An additional 70 million yards are yet to be moved a distance of from 1,500 to 2,000 feet. It is a simple dredging job. There are more than 20 idle dredgers in the San Francisco-Sacramento area at the present time and 5 of these dredgers could complete the dredging in 2 years' time, if funds are made available for the purposes.

Local interests are giving full and complete cooperation with the Federal Government. We are not asking the Federal Government to do this dredging without that local cooperation. We have done more than required of us and are now being held up in our further construction awaiting Federal dredging.

We, therefore, urge this committee to appropriate the largest amount which the Corps of Engineers can expend during the next fiscal year for work actually done during that year. In other words, appropriate a sufficient amount to pay for work which the contractors can actually do during the period. We estimate that amount to be $3.5 million to $4 million and urge this honorable committee to give favorable consideration to our request.

SACRAMENTO JUNIOR CHAMBER OF COMMERCE, SACRAMENTO, CALIF.

Whereas the Sacramento River deep-water channel project was authorized by Congress July 24, 1946; and

Whereas the Sacramento-Yolo Port District was created April 15, 1947; and

Whereas the port district has prepared plans for terminal facilities, voted $3,750,000 in bonds, and has purchased necessary rights-of-way; and

Whereas the port district has constructed a 500,000 bushel capacity grain elevator with connecting belt railroad and highway, total expenditure for rights-of-way and terminal facilities being $1,746,130; and

Whereas the State of California approved the project July 7, 1947, and appropriated $750,000 for rights-of-way; and

Whereas the Federal Government broke ground August 7, 1949, and has expended $2,428,823 for planning and construction up to June 30, 1952; and

Whereas no appropriation has been made for Federal dredging since the outbreak of the Korean war: Now, therefore, be it

Resolved, That the executive committee of the Sacramento Junior Chamber of Commerce request the House and Senate Appropriation Committees to make the maximum appropriation of money for dredging purposes that the Corps of Engineers can expend for work accomplished during the fiscal year 1954; be it further

Resolved, That William Stone be authorized to appear at House and Senate committee hearings and present this resolution on behalf of the executive committee of the Sacramento Junior Chamber of Commerce.

Adopted by the executive committee of the Sacramento Junior Chamber of Commerce this 7th day of May 1953.

RESOLUTION ADOPTED APRIL 29, 1953

Whereas the turning basin for the Sacramento River Deep Water Channel project is located in Yolo County 1½ miles west of the Sacramento River opposite the city of Sacramento as authorized by Congress July 24, 1946, and

Whereas the State of California approved and endorsed this project July 7, 1947, and appropriated $750,000 for purchase of rights of way, and

Whereas the Sacramento Yolo Port District voted bonds totailing $3,750,000 November 4, 1947, and

Whereas the port commission has expended $1,746,130 for rights of way, a grain elevator, belt railroad, highway and various facilities, and

Whereas the area contiguous to the turning basin is designated as spoil disposal area and cannot be used by the Port District for additional terminal facilities or for industrial development until the channel is dredged, and

Whereas, the port commission is held up in further construction of terminal facilities until dredging is completed, and

Whereas, the Federal Government under its first appropriation broke ground August 7, 1949, and under 3 small appropriations has moved a total of approximately 7 million yards of material constructing retaining levees, establishment of harbor lines and a portion of the channel to project depth expending a total of $2,428,823, and

Whereas approximately 70 million yards of clay, sand and silt remain yet to be moved, and

Whereas 20 dredgers in the immediate area are idle with no work in sight for them and can easily complete dredging of the 70 million yards of material in 2 years' time: Now, therefore, be it

Resolved, That the West Sacramento District Chamber of Commerce requests the House and Senate Appropriation Committees to make an appropriation of the largest amount of money that the United States Corps of Engineers can justifiably expend in work on the project in fiscal year 1954.

For the Board of Directors on this date.

BERT J. GRAHAM.
General Manager.

MAY 2, 1953.

RESOLUTION—BOARD OF SUPERVISORS, COUNTY OF YOLO, WOODLAND, CALIF.

Whereas the Sacramento River deep-water channel project authorized by Congress July 24, 1946, will widen, deepen, and straighten Yolo County waterways, with the deep-water channel terminating in Lake Washington turning basin in Yolo County, such new channel being 15 miles shorter than the present crooked shallow draft route; and

Whereas the total expenditure of the Corps of Engineers for advance planning and for dredging approximately 7 million yards of material is $2,428,823, with an estimated 70 million yards of material yet to be dredged; and

Whereas the Dredging Association of California has 20 idle dredgers, 5 of which could complete this dredging within 2 years' time; and

Whereas 2,000 acres of Yolo County farmland contiguous to the deep-water turning basin has been reserved for spoil-disposal areas and cannot be used for warehouse and industrial sites until the channel is dredged and spoil material placed on this land; and

Whereas Yolo County is a highly productive agricultural area with a number of diversified food-processing plants, all of which use water transportation extensively in reaching large population centers on or near the Atlantic, gulf, and Pacific coast ports and also foreign and worldwide markets; and

Whereas intercoastal carriers on October 1, 1952, canceled intercoastal transshipment terminal rates by water from Sacramento to Atlantic coast ports, thereby adding an additional freight transportation cost to be borne by shippers and receivers of freight: Now, therefore, be it

Resolved, That the Board of Supervisors of Yolo County, State of California, declare that the public welfare requires completion of the deep-water channel at the earliest possible date so that deep-sea ships can call at the Lake Washington turning basin and there lift our Yolo County and other northern California tonnage, thus restoring Pacific coast base rates to all ports of the Nation and to foreign ports; and be it further

Resolved, That the Board of Supervisors of the County of Yolo, State ofCalifornia, request the House and Senate Appropriations Committees to appropriate

for the Sacramento deep-water channel project the maximum amount which the Corps of Engineers can expend during the fiscal year 1954; and be it further

Resolved, that copies of this resolution be supplied the House and the Senate Appropriations Committees, also to Senators William F. Knowland and Thomas H. Kuchel, and to Congressman John E. Moss, Jr., and Congressman Clair Engle.

Passed and adopted by the Board of Supervisors of the County of Yolo, State of California, this 1st day of May 1953.

JOHN T. ROGERS,
Chairman of the Board of Supervisors, County of Yolo, State of California.

Attest:

[SEAL] C. L. HIDDLESON, *Clerk of Said Board.*

GREATER NORTH AREA CHAMBER OF COMMERCE RESOLUTION NO. 3, 1953

Whereas this organization since the formation of the Sacramento-Yolo Port District has actively and constantly supported the Sacramento River deep-water channel project and has been engaged since that time urging that funds be appropriated to continue the dredging of the ship channel, and

Whereas since the start of the Korean situation no moneys have been appropriated for this project from the Federal Government, the Sacramento-Yolo Port District has to date fulfilled their part of the contract, and we deem it necessary that funds be appropriated to resume dredging immediately: Now, therefore, be it

Resolved, That the Greater North Area Chamber of Commerce urge the support of the Senate and House Appropriations Committees that funds be appropriated for work that can actually be performed during the next fiscal year—namely, the maximum amount for dredging the deep-water channel from Cache Slough to the turning basin in Lake Washington—and we respectfully request that you lend your efforts toward this project, and be it further

Resolved, That the executive manager of the Greater North Area Chamber of Commerce be authorized and is hereby directed that copies of this resolution be presented by W. G. Stone, director of the Sacramento-Yolo Port District, for his presentation before the above-mentioned committees.

I hereby certify that the foregoing resolution was duly adopted by unanimous vote of the board of directors of the Greater North Area Chamber of Commerce on this 12th day of March 1953, North Sacramento, Calif.

[SEAL] FRED A. BOOTHMAN,
Executive Manager.

AREA DESCRIPTION

Mr. STONE. This brief map indicates the present route of the Sacramento River. The deep-water channel is 15 miles shorter than the present crooked river route. It will follow that route as shown [indicating].

The area shown in red has already been completed to project depth of 30 feet and 200 feet bottom width by previous appropriations.

This area shown in red constitutes the harbor, the upper 2 miles of the deep-water channel, and the turning basin [indicating].

The levees have all been constructed in that area.

The Yolo bypass is shown in the orange-colored line with the deep-water channel on the east side of the floodway.

The Army engineers contemplate doing some dredging in this lower area, which would open up the floodways, at the lower end of the Yolo bypass, by widening, straightening, and deepening those floodways. That is a part of the project.

We suggest that $1 million be appropriated, or something in that general range, for work in that area for fiscal year 1954.

It will serve a dual purpose: opening up these floodways for flood control and construction of the navigation levees from this point over to that point [indicating].

In addition, the dredgers can be floated up the Yolo Bypass channels to this point, there cut through the levee, over to the turning basin; and, by moving the material out of the turning basin on to the adjacent spoil areas, it would raise the elevation from 14 feet to 21 feet, so that the port district can proceed with its construction program [indicating].

Senator McCLELLAN. What is that distance?

Mr. STONE. Twenty-four miles from this point to the turning basin.

Senator McCLELLAN. What is the estimated cost?

Mr. STONE. At the present time there is a floodway channel 9 feet in depth, and it is a question of widening and deepening and straightening the channel.

Senator McCLELLAN. Is it there now?

Mr. STONE. There is a drainage channel there now.

Senator McCLELLAN. What is the estimated cost of making it navigable?

Mr. STONE. The Army engineers could give you more accurate figures. I would say something in the neighborhood of $20 million for dredging.

FEDERAL EXPENDITURE TO DATE

The Federal Government has spent up to this time $2,428,823 in doing work in this area and work around the turning basin there.

Senator McCLELLAN. Does traffic presently go around the river?

Mr. STONE. The river is a crooked, silt-bearing stream. It has a navigation depth of 10 feet in the summer months.

The local interests have voted bonds for $3,750,000, the State of California has appropriated $750,000.

A total of $4,500,000 is available for local interest work in participation with the Federal Government.

The next drawing I have shows an industrial area contiguous to the port at this point [indicating]. The port district has constructed a grain elevator at this point, served by its belt railroad and highway.

The Farmers Rice Growers Cooperative has just purchased a 9-acre site at this point [indicating] and are spending $1,800,000 on a rice elevator and mill in anticipation that the port will be finished at an early date.

Seventy-five percent of their shipments go to offshore markets and require water transportation.

WEST SACRAMENTO FREEWAY

The State of California is building a west Sacramento freeway. They are building an overpass over that freeway, providing a direct access to the harbor at this point [indicating]. That is under construction now. It is being built at the project site to conform to the level of this land when the material is taken out of the harbor and placed upon this lowland, the elevation of which is 14 feet and the material raised up to 21 feet.

The State of California is now spending a large sum of money on that overpass, providing direct highways to the port.

Senator ELLENDER. A moment ago one of the witnesses complained that some of the ports on the coast are not getting the business they should, and he stated that the port at Redwood should not be improved.

What effect would an improvement of this channel that you speak of have in further curtailing the business of these other ports?

Mr. STONE. This port will develop wholly new tonnage.

Senator ELLENDER. Where does that tonnage go now?

STEEL MILL ANTICIPATED

Mr. STONE. In the first place, there is a steel mill which has now been authorized and which we believe will be constructed in the near future. That will bring in wholly new traffic which has not existed in that part of California before. Present traffic has to move to more distant ports at much greater expense to shippers to reach shipside.

Senator ELLENDER. Where will the ore come from?

Mr. STONE. One hundred and seventy miles north of Sacramento. And it will come in by rail.

Some ore can come in by water. Some of the ore can come in from southern Oregon, by water.

Senator ELLENDER. Will that be through this canal?

Mr. STONE. Through this channel; sir, that is right.

NATIONAL DEFENSE ASPECTS

Now, I am going to point out the national defense aspects.

The channel will come up to the harbor at this point [indicating]. Here is McClellan Field, just a short distance from the turning basin. Here is Mather Field. Here is the Sacramento Signal Depot. This point is Travers Air Base, and just above here is Camp Beale.

There are five military establishments in close proximity to the turning basin.

McClellan Field at the present time brings the barges of damaged airplanes up the Sacramento River to a private Government dock and tows them to the McClellan Field.

When the channel will be completed, vessels can bring the planes to the turning basin and without going through any congested area reach McCllelan Field for servicing.

In addition there are a number of industrial plants as well as the military establishment in close proximity to the port as shown.

I have one more map and then I'm through.

This shows McClellan Field at this point. Our harbor is located here. The Government dock is at this point. The planes move by that route at the present time. When the channel is finished they would move by this route to the turning basin [indicating].

The area in general is a 260-acre tract, which I just showed you. The overpass to the highway is at this point, making a direct access to the turning basin.

LAND PURCHASE BY SACRAMENTO NORTHERN RAILROAD

Recently the Sacramento Northern Railroad purchased 300 acres of industrial land at this point, within 2 miles of the turning basin. And they announced by their president, Mr. Rex Kearney, in the news-

papers, that one of the controlling reasons for purchasing that site was its close proximity to the deep-water project. They purchased the site for industrial development because it was close to the port.

SCOPE OF PROJECT

Mr. Chairman and members of the committee, I will take up no more of your time, but in closing let me say that this project is designed to serve 24 northern California counties, 4 southern counties in Oregon, and the northern tiers of Nevada counties. It will develop wholly new traffic which has not yet moved.

It will serve those areas in reaching the large centers of population on the Atlantic and gulf coasts as well as to foreign markets.

We urge that this committee give favorable consideration to making the largest appropriation which you can make consistently, which the Army engineers can economically spend for work which their contractors can actually do during fiscal year 1954.

I thank you for the opportunity of appearing before you, sir.

I have one more witness, Mr. Charles W. Deterding, our county executive, who I will ask to appear at this time.

Senator KNOWLAND. You may proceed with your statement, sir.

SACRAMENTO COUNTY, CALIF.

STATEMENT OF CHARLES W. DETERDING, COUNTY EXECUTIVE

LOCAL INTEREST MANIFESTED

Mr. DETERDING. Mr. Chairman, and gentlemen of the committee, to show the local interest, I have a resolution here from the Sacramento County Board of Supervisors, I would like to have filed for the record.

I have also a resolution from the Sacramento Chamber of Commerce which I would likewise like to file for the record, and a resolution from the City Council of Sacramento, in addition to my statement.

Senator KNOWLAND. That may go into the record.

(The material referred to follows:)

STATEMENT OF CHARLES W. DETERDING, COUNTY EXECUTIVE, SACRAMENTO COUNTY, SACRAMENTO, CALIF.

My name is Charles Deterding I am the county manager of Sacramento County, Calif.

I have been instructed by the board of supervisors, which you may know as the county commissioners, to come here and ask your support in authorizing an appropriation to continue construction on the Sacramento River ship channel project.

I would like to present for the record a resolution from the city council, the Sacramento Chamber of Commerce and the Board of Supervisors of Sacramento County.

Sacramento County and the Sacramento Valley is basically and primarily an agricultural area engaged in intensive farm practices, producing commodities that are largely processed locally and prepared for shipment to the markets of the world. Since the days of the gold rush in 1849, Sacramento has been an important point of water shipment for northern California. The Federal Government all through these years has recognized this fact by contributing funds for the maintenance of navigation on the Sacramento River.

With the very extensive growth in our population and industries, the Sacramento River, with its present 10-foot channel, is in no sense adequate to meet the water transportation requirements of northern California.

During the war this type of project of necessity had to wait for a more opportune time for its construction. Now that we are developing our public facilities to meet the demands upon them, it is imperative that work be started on the Sacramento River ship channel at the very earliest data.

The State of California is vitally interested in this project. The State legislature, recognizing the importance of the Sacramento River ship channel project to California's development, has appropriated funds to assist in the purchase of rights-of-way contingent upon Federal Government's participation.

When the bond election was presented to the voters, it was carried by better than 6 to 1. This is indicative of the interest of our local people in this project; particularly in view of the fact that we are a pay-as-you-go county and have emphasized that fact to our citizens for a long period of time.

Local interests have voted the necessary funds for the construction of terminals, docks, and wharf facilities. The State of California has appropriated funds for the purchase of the rights-of-way. It remains now for the Federal Government to join in the cooperative undertakings.

The local interests have in every way fulfilled their obligation and their promise to the congressional committee that funds for these facilities would be provided. Therefore, the people of Sacramento County feel justified in asking that you appropriate funds at this time to continue construction of the Sacramento River ship channel.

A pressing need in Sacramento, to adequately serve the surrounding area, was a grain elevator for the bulk storage of grain by the general public. No such facilities existed anywhere in northern California. The port district has constructed such an elevator that will serve for the storage of grain and will likewise be an economic facility serving the shipping interests which will use the port.

The trading area immediately contiguous to the port is an extensive producer of grain, rice, beans, canned fruits, vegetables, dried fruits, almonds, processed milk products, lumber, and many other incidental commodities that would be shipped to markets of the world through oceangoing ships that would provide low transportation costs.

The county of Sacramento has increased in population from 170,000 people in 1940 to an estimated population, as of January 1, 1953, of 338,000 people. This is not only indicative of the growth of Sacramento County, but likewise approximately the same increase is taking place throughout the whole trade area; so that our present shipping facilities on the Sacramento River are most inadequate, uneconomic, and unsatisfactory.

Sacramento County is again requesting that funds be appropriated to continue the construction on the Sacramento River ship channel.

Thank you for the privilege of presenting the Sacramento River ship channel project to you.

SACRAMENTO COUNTY,
OFFICE OF BOARD OF SUPERVISORS,
Sacramento, Calif., May 6, 1953.

HOUSE AND SENATE SUBCOMMITTEE ON
APPROPRIATIONS FOR CIVIL FUNCTIONS,
Washington, D. C.

GENTLEMEN: The Board of Supervisors of Sacramento County respectfully recommended that the maximum appropriations for further dredging on the Sacramento deep water channel project be authorized in the amount which the Corps of Engineers can economically spend during the fiscal year 1954.

Mr. Charles W. Deterding, county executive of Sacramento County, is hereby authorized to appear personally before said committee of the House and Senate to present such data in support of the project that is necessary.

Respectfully submitted.

JAMES R. GARLICK,
Chairman, Board of Supervisors.

RESOLUTION

Whereas the Sacramento Chamber of Commerce has for many years advocated the further improvement of the Sacramento River by providing a deep water ship channel project to enable oceangoing vessels to call at the inland port of Sacramento serving she Sacramento metropolitan area and its hinterland; and

Whereas Congress authorized the Sacramento River deep water channel project July 24, 1946 and by using connecting sloughs and waterways shortens the present water route from the Pacific Ocean by 15 miles; and

Whereas this congressional authorization provides that the Federal Government will do the initial dredging and future maintenance provided that local interests provide free of cost to the Federal Government necessary rights-of-way for initial construction and future maintenance, construct, maintain and operate adequate terminal facilities including railroad and highway connections and relocate utilities; and

Whereas the Sacramento-Yolo Port District was created April 15, 1947 and includes the whole of Sacramento County and Supervisorial District No. 1 in Yolo County; and

Whereas the State of California on July 7, 1947 adopted and authorized the deep water channel project, instructed the Sacramento-Yolo Port District to cooperate with the Federal Government, State of California and other public bodies in connection with construction of the project and appropriated $750,000 for rights-of-way; and

Whereas the above appropriation was made contingent upon the Federal Government making an appropriation for construction and the port district voting bonds for local participation; and

Whereas the port district voted $3,750,000 bonds for local participation November 4, 1947; and

Whereas an agreement of assurance was given the Federal Government December 24, 1947 that the port district would comply with the act of authorization with respect to rights-of-way, etc.; and

Whereas the port district loaned $500,000 of its bond money to the Federal Government to start and speed up construction of the project, only $300,000 of which has been returned to the port district; and

Whereas the Federal Government broke ground and started construction August 7, 1949 and has constructed retaining levees around the turning basin, along the barge canal and the upper 2 miles of the deep-water channel and has completed to project depth approximately 4½ miles of the deep-water channel, involving the total movement of approximately 7 million yards of material; and

Whereas 70 million yards of material yet remains to be dredged to complete the project; and

Whereas the Dredging Association of California advises there are 20 idle dredgers with no work in sight for them and that 5 of them can complete moving the 70 million yards within 2 years time; and

Whereas the Interstate Commerce Commission permitted intercoastal steamship carriers to cancel the terminal rates from Sacramento to Atlantic coast ports effective October 1, 1952; and

Whereas this cancellation works a severe hardship upon shippers and receivers of freight who pay and bear these transportation charges which must ultimately be passed on to the consumer; and

Whereas for the past 20 years the Sacramento Chamber of Commerce has been intermittently involved in litigation with respect to Sacramento's terminal rates by transhipment; and

Whereas the general purpose of the deep water channel project is to provide an improved waterway so that oceangoing vessels can call at Sacramento 12 months in the year and apply base or terminal rates upon cargo handled when such calls are made; and

Whereas Sacramento is the center of large food production with five of the world's largest food-processing plants located here, all of which use water transportation extensively in reaching markets in the large centers of population at or near Atlantic, Gulf, and Pacific coast ports and also to worldwide markets; and

Whereas the deep water channel project lends itself to the cause of national defense by providing a large harbor 6 miles in circumference located 90 miles inland making a strategic location for loading of troops and war materials in event of a major war, and in addition for 25 miles below the channel an ideal location for industrial plants or military establishments along the channel; and

Whereas 3 military fields are located in the immediate Sacramento metropolitan area and 2 other fields in nearby communities; and

Whereas 2,000 acres of level farmland contiguous to the harbor area has been reserved as spoil-disposal area; and

Whereas this farmland cannot be used for warehouse and industrial development purposes until the spoil material is placed upon the land; and

Whereas the Sacramento-Yolo Port District is being held up in its terminal and warehouse construction program until the Federal Government completes its dredging of the deepwater channel: Now, therefore, be it

Resolved, That the Greater Sacramento Chamber of Commerce reaffirm its long-standing advocacy of construction of the deepwater channel and declare that general public welfare requires its early completion in order that deep-sea ships may call at Sacramento and thereby apply Pacific coast base rates to all ports of the Nation and to foreign and offshore ports; and be it further

Resolved, That the Greater Sacramento Chamber of Commerce respectfully petition the United States House of Representatives and the United States Senate Appropriations Committees to appropriate the maximum amount of funds for this project which the United States Corps of Engineers can economically expend during the fiscal year of 1954 for work that can actually be accomplished during that period; and be it further

Resolved, That Mr. Charles Deterding, Sacramento County executive, be authorized to personally appear and present copies of this resolution to the Appropriation Committees.

This is to certify that the foregoing is a true and correct copy of the resolution adopted at the regular meeting of the board of directors of the Sacramento Chamber of Commerce held Monday, May 4, 1953.

Attest:

W. L. GREER, *President.*
LEWIS H. DAY, *General Manager,*
Sacramento Chamber of Commerce.

RESOLUTION ADOPTED BY THE SACRAMENTO CITY COUNCIL, APRIL 30, 1953

SACRAMENTO RIVER DEEP-WATER CHANNEL

Whereas the Sacramento River deep-water channel was authorized by Congress in 1946; and

Whereas local interests created the Sacramento-Yolo Port District in 1947 and gave assurance of local participation, all in compliance with the act of authorization; and

Whereas the Federal Government started construction in 1949 and has spent approximately $3,000,000 for dredging; and

Whereas intercoastal carriers have canceled intercoastal terminal rates from Sacramento effective October 1, 1952, thereby placing an undue transportation burden on shippers and receivers of freight; and

Whereas the only solution of this intercoastal rate problem affecting both seaboards is the early completion of the channel; and

Whereas a number of dredgers are idle in the San Francisco Bay area at the present time: Now, therefore, be it

Resolved, That the city council of the city of Sacramento hereby respectfully requests both the House and Senate Subcommittees on Appropriations for Civil Functions recommend the maximum appropriation for further dredging of the Sacramento River deep-water channel project which the Corps of Engineers can economically and profitably expend during the fiscal year 1954; and be it further

Resolved, That Charles W. Deterding be and he is hereby authorized and requested to personally appear before said committees of the House and Senate to present pertinent facts and data in support thereof, including a copy of this resolution.

LESLIE E. WOOD, *Mayor.*
H. G. DENTON, *City Clerk.*

CERTIFICATION

I hereby certify that the above is a full, true, and correct executed copy of the original of a resolution adopted by the city council at regular meeting of said body on date of April 30, 1953, memorializing the Congress to appropriate funds for the further construction of the Sacramento River deep-water channel.

Certified this 5th day of May 1953.

[SEAL]

PAUL H. MANBY,
Chief Deputy City Clerk.

Mr. DETERDING. Mr. Chairman, I just want to say the community is very much interested in this project and is anxious to see it completed.

Senator KNOWLAND. Thank you, sir.

SACRAMENTO DEEP-WATER CHANNEL

Senator KNOWLAND. The committee has received a letter from Senator Thomas H. Kuchel, of California, expressing his interest in the Sacramento deep-water channel. The letter will be placed in the record at this point.

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
May 14, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR: This is to advise you of my interest in the resumption during fiscal 1953–54, if possible, of the work of the United States Army Corps of Engineers on the Sacramento deep-water channel.

The project was authorized by the Congress on July 24, 1946. It will serve the Sacramento-Yolo Port District, whose representatives will appear before your subcommittee tomorrow, May 15, 1953.

On July 7, 1947, the State of California (ch. 1152, Stat. 1947) approved the project substantially as authorized by Congress, and, as an earnest of its interest, the legislature appropriated $750,000 for the purchase of rights-of-way, contingent upon the Federal Government making an appropriation for construction and the port district voting bonds for local financing.

By a vote of better than 6 to 1, the voters of the district, on November 4, 1947, endorsed a bond issue of $3,750,000. The Federal Government in 1948 made its first appropriation of $250,000 for fiscal 1949. These two actions qualified the State appropriation of $750,000.

The act of authorization by the Congress provided that the Federal Government would not start construction until local interests gave assurance that rights-of-way would be provided, and adequate terminal facilities constructed, maintained, and operated to meet the needs of commerce. The port authority promptly gave these assurances, loaned $500,000 to the Federal Government to assist in starting and speeding up construction, purchased over 1,000 acres for rights-of-way and easements, built a grain elevator, constructed 4 miles of belt railroad and 1 mile of highway, and laid out a 30-year master plan of port terminal development and construction.

The Federal Government broke ground on August 7, 1949, and up to June 30, 1952, has expended a total of $2,428,823 upon the project, including planning, dredging operations, and earth movement. There was no appropriation for the present fiscal year, however, because of executive department restrictions based on the world military situation.

It is my belief that both from the standpoint of the civilian economy of Sacramento and the Sacramento Valley, and the transportation requirements of the large military installations in the vicinity of the city of Sacramento, the Sacramento deep water channel is meritorious and its early completion in the national interest.

One of the most urgent problems of our State, as you know, is to improve employment opportunities for our rapidly increasing population. Adjacent to the Sacramento deep water channel there are large areas of land suitable for the location of industrial plants and warehouses. These would be utilized by many firms which are seeking suitable locations and whose operation requires economical transportation. The channel will bring seagoing vessels 90 miles inland to serve the 24 northern counties of California.

This project ought not to be delayed further. It is my sincere hope that your subcommittee, and the Congress, may act favorably upon the recommendations of the port authority for the funds necessary to its early completion.

Very sincerely yours,

THOMAS H. KUCHEL.

Senator KNOWLAND. Congressman Scudder, if you can get your witnesses together on Humboldt Harbor here for a 5-minute period, we will be glad to hear you. We are running a little behind schedule.

HUMBOLDT HARBOR, CALIF.

STATEMENT OF HON. HUBERT B. SCUDDER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

PREPARED STATEMENT

Mr. SCUDDER. I will be just as brief as possible, Mr. Chairman and members of the committee.

I have a statement that I ask to be printed in the record.

Senator KNOWLAND. It will appear in the record in its entirety at this point.

(The statement referred to follows:)

HUMBOLDT HARBOR

Statement of Hon. Hubert B. Scudder, Member of Congress

Mr. Chairman and members of the committee, we appear before you this afternoon in the interest of an appropriation for the deepening of Humboldt Harbor, located in the northern part of California, and about half way between San Francisco and Portland, Oreg. There is only one other harbor of importance between San Francisco and Portland, and that is located at Coos Bay in Oregon. Humboldt Bay is the only potential economical outlet for the shipment of lumber from northern California and southern Oregon. The largest stand of virgin timber in the United States lies in this area and in order to economically move the same, we must have an adequate harbor so that ships can ply in and out with full cargoes. This is presently not possible.

Last year Congress passed, and the President signed, an authorization bill to deepen this harbor to 40 feet at the bar and 30 feet on the inside channel. The present depths are 30 feet at the bar and 26 feet on the inside. However, the engineers, realizing the inadequacy of the harbor depths, have gone as far as they can by an overdredge of 2 feet. This has been of considerable help because the still water in the bay permits the full loading of the smaller ships, and on high tide, can navigate quite satisfactorily. However, the bar is entirely inadequate. Ships hauling lumber draw from 28 to 31 feet of water. These are the MST's used in World War II, and continue to operate in this traffic.

I have had this project up with the engineers on various occasions and had favorable recommendations from them when this project was authorized last year, and they presently recommend that this project be developed.

The Humboldt Bay Harbor was authorized in 1881, and from time to time maintenance money has been expended thereon. However, no major improvement has been made in many years.

I desire to place in the record a letter from General Heileman, in charge of the shipment of Federal lumber from Humboldt Harbor, portions of which I used last year as evidence when seeking authorization of the improvements to the harbor. This letter sets forth that the Federal Government lost about $32,000 last year because of the lack of proper harbor facilities.

I also desire to insert a letter from Mr. Earl W. Loveridge of the United States Department of Agriculture, and call your attention particularly to the last paragraph on page 2 which points out that the Federal Government is losing $650,000 a year from lack of proper harvesting of available timber. If Humboldt Bay can be made a safe harbor, not only will the ships that now desire to haul from there use the facilities, but many foreign ships and other intercoastal ships will make this a regular port of call, which will make possible competitive transportation facilities with other areas, including Canada, and encourage the harvesting of the overripe timber, most of which is federally owned. In this letter attention is called to the federally owned timber, but there is a similar proportion of privately owned, overripe timber that should be harvested.

From a technical standpoint, and a technical standpoint only, can this project be deemed a new project. Each major development of a project is recognized as a new project, but it is hard for me to visualize Humboldt Harbor, which has been in operation since 1881, as being a new project. The light-draft ships that operated during World War I and shortly after, were able to navigate but the larger ships that went into service prior to World War II and since, cannot possibly operate from that harbor in its present condition.

I am very much concerned regarding the economy of this area. In the last few years practically all of the large plywood and lumber operators have moved into the northern California area. Their only method of shipping is by a one-track railroad that operates from San Francisco Bay district to Eureka, and trucking over a two-lane highway between San Francisco and Crescent City, and the water facilities at Eureka.

I am informed that the Canadian Government now have in operation 30 ships transporting lumber from the Canadian west coast to our eastern seaboard. Their ships operate for about $4 per thousand board feet less than American shipowners can operate. This means with their lower shipping rates and lower labor costs, we are apt to have a shutdown in our lumber industry because of this competition. This would throw tens of thousands of people out of employment. We must have proper facilities in order to compete with other sources of supply. If we have unemployment, we have loss of taxes besides an outlay of public funds for unemployment insurance and relief, which is bound to follow.

I feel that an exception should be made to the rule, and it is a poor rule if no exception can be made, especially where the economy of the country is concerned.

The Army engineers state that $410,000 would make this a first-class harbor and guarantee year-round operations.

I trust that this committee, in its wisdom, will favorably consider the recommendations of the engineers which will guarantee the usability of Humboldt Harbor.

GENERAL STATEMENT

Representative SCUDDER. I might comment just a bit. Humboldt Harbor was first authorized in 1881, and there have been no major improvements except for maintenance in many, many years.

This is a project that will stimulate and generate new traffic.

Most of the steamship companies have voluntarily sent letters to me that they will use this harbor if it is deepened and made safe for passage of full cargoes.

There was an authorization last year that passed the Congress and was signed by President Truman, which was one of a very few which provides for the deepening of the interior of the harbor from 26 to 30 feet and the bar from 30 to 40 feet to make the harbor usable.

LUMBER INDUSTRY CENTER

That area now is the center of the lumber industry in this country. The very last stand of virgin timber is located in the 2 southern Oregon counties and the 4 northern California counties, and transportation is the one thing that is necessary to stimulate the harvesting of the timber.

Also, I would like to put into the record, in addition to my statement, a statement from Maj. Gen. F. J. Heileman, of the Office of the Chief of Transportation, Department of the Army, which was given to me last year when the project was to be authorized, showing that the Federal Government was losing about $32,000 a year in the hauling of their own lumber from that harbor, because of the harbor's not being improved.

Senator KNOWLAND. That will appear in the record also at this point.

(The statements referred to follow:)

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF TRANSPORTATION
Washington 25 D. C. April 10, 1952.

Hon. HUBERT B. SCUDDER,
House of Representatives,

DEAR MR. SCUDDER: Reference is made to your letter of March 5, 1952, and to my interim reply, dated March 20, 1952, relative to the forecast movement of Department of the Army lumber through Humboldt Harbor.

The Office of the Chief of Engineers has informed me that the Eureka area is considered to be one of the better sources of supply of western softwoods. A forecast of the long-range movement program of lumber from this area cannot, however, be made since the locations of the producing mills of the low bidders are not known until the bids are opened by the Corps of Engineers.

In December 1951, 65 million board feet measure were offered by the Portland engineer district in "auction," and bidders in the Eureka area were awarded contracts for 9,750,000 board feet measure to be filled from Humboldt Bay during April, May, and June, 1952. Assuming that the lumber dealers in the Humboldt Bay area are awarded contracts for future procurement in the same ratio that they were successful in the December 1951 auction, they may be reasonably expected to receive contracts for approximately 40 million board feet measure per year.

The apparent potential savings in inland transportation costs that would be realized when comparing loadings at Humboldt Bay to loadings at the Oakland terminal of the San Francisco port of embarkation are not realistic as the Army will continue to load all cargo at the port and terminal facility that will result in the lowest cost from point of origin to overseas destination, consistent with the exigencies of the military situation. Accordingly, the cost comparison must be evaluated on the basis of savings in vessel time that may be reasonably expected in the event that the channel to this harbor was dredged to a sufficient depth to permit the passage of fully laden vessels. Therefore, considering the number of longshoremen gangs that are available in Humboldt Bay together with the present condition of the terminal facilities, it is believed that the entire lumber production capacity of this area, estimated by Engineer Corps to be in the neighborhood of 100 million board feet measure per year, could be lifted on approximately 40 ships, assuming that 2,500,000 board feet measure were loaded on each ship, which would approximately be one-half of a vessel's capacity. Assuming further that it would take 5 days on a 1-shift basis to load each vessel, with partial ship loads of approximately 2½ million board feet measure, this would amount to 200 days a year that lumber would be loaded aboard ships at Eureka. To make the total days more realistic, 80 days lost time while on berth, due to such considerations as bad weather, readying the ship to receive cargo, failure of cargo gear facilities, time for securing cargo, etc., must be anticipated and added to this, or a total of 280 days that ships would be on berth during the period of a year to lift the 100 million board feet measure.

It is estimated that an average of 1 day of ship's time would be lost for each vessel entering and departing from Humboldt Bay. Assuming that the Army would procure 40 million board-feet in the Eureka area during each year, based on present procurement as shown in third paragraph of this letter, this would require approximately 8 full-ship loadings or 5 million board-feet measure per vessel if the channel was dredged, or 16 ships partially loaded due to the existing shallow channel. The present estimated daily cost of operation of a Victory ship under time charter is $2,000. For the 16 vessels, estimating 1 day's lost time per vessel entering and departing from the harbor, the estimated savings would amount to $32,000 per year. Other than the estimated saving as shown, I can foresee no other economy resulting from increasing the depth of the channel.

The matter of loading partial or full-ship loads of lumber at Humboldt Bay has been discussed with Commander, Military Sea Transportation Service, Department of the Navy, and in view of the scarcity of proper type of cargo for bottom stowage of vessels, it has been determined that a more efficient utilization of vessels' cargo space is realized by loading lumber in Humboldt Bay and then topping off with other cargo at another port.

Generally speaking, the improvement of all harbors, to include Humboldt Bay, is of interest to the Transportation Corps from the standpoint of possible use by the Army during both peacetime and periods of mobilization. However, due to the fact that definite information is not available as to the future need of the port of Eureka by the Army, I am not in a position to indicate whether the deepening of the harbor would result in a benefit to the Government.

I appreciate your interest in the improvement of the harbor at Humboldt Bay from the standpoint of possible future use by the Army. I regret that I am unable to furnish you with more specific information.

A copy of this letter together with a copy of your letter to General Lester, dated March 5, 1952, is being forwarded to Chief of Engineers (Attention: Chief, Procurement Division) for his information.

Sincerely yours,

F. A. HEILEMAN,
Major General, USA, Chief of Transportation.

STATEMENT OF FOREST SERVICE

Representative SCUDDER. I would also like to file for the record a statement from the Forest Service of the Department of Agriculture showing the necessity for this harbor.

I would like to read a paragraph from the letter and have the entire letter put in the record. It states:

In 1951, Humboldt County accounted for 25 percent of the total lumber production in California. 810 million feet of Douglas fir were cut in Humboldt Bay. The current rate of cutting is approximately 25 million board feet compared to a sustained yield cutting capacity of about 90 million feet. The national forest timber is much less accessible than the private timber. The 65 million feet of undercut on the Six Rivers National Forest result in the loss of about $650,000 of gross revenue annually to the United States. Since generally losses from decay and other natural factors balance growth in virgin timber areas, this undercut is lost each year rather than being stored up for future use.

COST TO FEDERAL GOVERNMENT

The loss is $650,000 a year in northern California and $200,000 in southern Oregon.

According to their own report, our undercut is costing the Federal Government $850,000 a year, mainly because we do not have cheap transportation facilities that would encourage a heavier cutting of timber.

I would like to place that letter into the record.

Senator KNOWLAND. That may go in the record at this point.

(The letter referred to follows:)

UNITED STATES DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, April 8, 1953.

Hon. HUBERT B. SCUDDER,
House of Representatives.

DEAR MR. SCUDDER: Reference is made to your discussions on March 27 with Mr. Mason of this office on the significance of Humboldt Bay Harbor improvements to marketing of national forest timber. You explained that a deeper channel across the Humboldt Bay bar is necessary to permit loading of full cargoes for coastal or intercoastal shipping and requested our advice on what such a harbor improvement would mean to the local timber economy and to the timber management program of the tributary national forests.

Northwest California is just about the last timber frontier in the 48 States. The timber industry in Humboldt and Del Norte Counties has expanded sensationally since the close of the war. The depletion of old-growth timber in western Washington and northwest Oregon has resulted in a migration of forest products industries from that area into northwest California. This migration is still in progress.

A full-scale development of the potentialities for timber production in northwest California and southwest Oregon is impeded by lack of adequate transportation facilities. For rail shipments lumber must be brought south to Arcata or Eureka, Calif., or north to Coquille, Oreg. The distance between these 2 points is 220 miles on the coast highway. For lumber shipments by water the only

available harbors for ocean vessels are at Humboldt Bay in California and Coos Bay in Oregon. The distance between these 2 harbors is 240 miles on the coast highway. At Crescent City, harbor improvements have been installed which permit the use of barges but not oceangoing vessels. Some lumber is now being barged from Crescent City to Humboldt Bay for transfer to coastal and intercoastal steamers.

You pointed out the depth across the Humboldt Bay bar is not sufficient to permit the passage of outbound fully loaded vessels. Hence only a partial load of lumber can be picked up at Humboldt Bay and a ship must proceed to other ports in order to pick up a full cargo. The added expense involved in such partial loading tends to restrict marketing opportunities for the timber tributary to the Humboldt Bay Harbor. This handicap retards the development of the entire tributary area and in the long run adversely affects stumpage values of the area.

While there is a certain amount of cross haul along the boundary between Trinity and Humboldt Counties, with logs going to Eureka and Redding passing each other going in opposite directions, it can be assumed that a volume equivalent to that in Del Norte and Humboldt Counties in logically tributary to Humboldt Bay or Crescent City.

This area has experienced a phenomenal growth in the past 10 years. Humboldt County is now second only to Lane County, Oreg., in the production of lumber.

The estimated timber stand in 1945 follows:

	Million board feet		
	Public	Private	Total
Del Norte	5,383	6,461	11,844
Humboldt	8,864	37,055	45,919
Total	14,247	43,516	57,763

In addition, there are about 2 billion feet of national forest timber in Curry County, Oreg., tributary to Crescent City.

Lumber production in Del Norte and Humboldt Counties (all species)

	Million board-feet	
	1943	1951
Del Norte	4	141
Humboldt	435	1,223

In 1951 Humboldt County accounted for 25 percent of the total lumber production in California. Eight hundred and ten million feet of Douglas fir were cut in Humboldt Bay. The current rate of cutting is approximately 25 million board-feet compared to a sustained-yield cutting capacity of about 90 million feet. The national-forest timber is much less accessible than the private timber. The 65 million feet of undercut in the Six Rivers National Forest result in the loss of about $650,000 of gross revenue annually to the United States. Since generally losses from decay and other natural factors balance growth in virgin-timber areas, this undercut is lost each year rather than being stored up for future use. A somewhat similar situation prevails in the portion of the Siskiyou National Forest in Oregon tributary to Crescent City, where there is a sustained-yield cutting capacity of approximately 20 million board-feet annually and only minor amounts are currently being cut. Until such time as the Crescent City Harbor facilities can be developed for oceangoing vessels, the timber tributary to Crescent City is also dependent for intercoastal marketing opportunities on the harbor facilities at Humboldt Bay.

For the above reasons this deepening of Humboldt Bay Harbor to permit larger ships to take on full cargoes would advance opportunities to market the full sustained-yield cut from the Six Rivers and Siskiyou National Forests.

Sincerely yours,

RICHARD E. MCARDLE, *Chief.*
By EARL W. LOVERIDGE.

INTEREST OF STEAMSHIP COMPANIES

Representative SCUDDER. I also have a statement from former Senator Joseph H. Ball that I also desire to have placed in the record, showing that the steamship companies of the United States are desirous of having this harbor improved so that they can haul lumber in modern ships.

Senator KNOWLAND. That statement may also go into the record.

(The statement referred to follows.)

STATEMENT ON HUMBOLDT BAY PROJECT BY JOSEPH H. BALL, VICE PRESIDENT AND WASHINGTON REPRESENTATIVE OF THE ASSOCIATION OF AMERICAN SHIPOWNERS

Our association, which comprises a group of unsubsidized shipping lines, joins in urging an appropriation to dredge the channel at Humboldt Bay, Calif. Two of our member companies, States Steamship Co. and Luckenbach Steamship Co., are now certificated to call at Humboldt Bay for cargo. A third, States Marine Co., has an application for certification pending before the Interstate Commerce Commission. The examiner who heard the application has recommended that it be granted, and the certificate is expected to be approved shortly.

All three of these companies have stated that they would send ships into Humboldt Bay if the channel were deepened. They do not call there now because it is uneconomic to do so. Ships have to go into the bay empty and can take out only a part of a cargo. This usually means retracing a ship's route up or down the coast to complete a cargo. With out-of-pocket operating costs of a large American-flag ship running $1,600 or more per day, the extra voyage days involved in such an operation make it impossible to pick up cargo at Humboldt Bay now at a profit. Once the channel is dredged, ships can pick up cargo there in the regular course of a coastwise voyage.

Representative SCUDDER. I might point out that the ships draw from 28 to 31 feet of water, and we only have a 30-foot bar.

I would like to present to you at this time, Mr. Chairman, Mr. William H. Foss, traffic manager of the A. C. Dutton Lumber Corp., of Poughkeepsie, who have large investments in northern California and deal in intercoastal shipments.

Mr. Foss, will you please come forward?

Senator KNOWLAND. You may proceed with your statement, sir.

A. C. DUTTON LUMBER CORP., POUGHKEEPSIE, N. Y.

STATEMENT OF WILLIAM H. FOSS, TRAFFIC MANAGER

PREPARED STATEMENT

Mr. Foss. Mr. Chairman and members of the committee, to save time, I would like to file with you these two statements I have here, which are comprehensive on the project.

Senator KNOWLAND. They may go into the record at this point.

(The statements referred to follow:)

STATEMENT OF THE A. C. DUTTON LUMBER CORP. RE IMPROVEMENT OF HUMBOLDT BAY, CALIF.

It happens that this corporation, by virtue of the role it played in the two World Wars, and its research for adequate lumber supplies for its business in peacetime, is in a good position to evaluate the lumber-supply problem during national emergencies.

During both wars our eastern terminals were used by the Army engineers as lifesavers on construction jobs frustrated for lack of lumber, and for quick needs of overseas armies. When the emergency ended, the Army urgency ceased, but

our peacetime requirements continue. The purpose of this brief is to present the situation as it appears to us.

For 35 years our main source of supply has been the large tidewater mills located on Puget Sound, Grays Harbor, and Columbia River. These districts were also a basic source of supply for the Government during the wars. The backbone of the production was always the large tidewater mills. At the height of production we had no difficulty in securing 2 to 3 cargoes per month. Today it is getting increasingly difficult to get one cargo per month.

During the last 20 years well over 60 of these tidewater mills have closed. Lack of saw logs is the reason.

The depletion of timber adjacent to the tidewater mills still operating necessitates their transporting logs over increasingly long distances.

Millions of trees are being planted but it takes 40 years to grow trees suitable for pulp, and 80 years for saw logs.

A very extensive pulp and paper industry has developed in the last 20 years and these mills will require the new growth long before it becomes large enough for lumber.

Our research indicates that the State of Washington is rapidly gravitating to a pulp and paper economy.

There will be some lumber production in Washington and northern Oregon for years to come but except for a very few operators who still have substantial timber holdings, this production will be by small inland mills shipping by rail.

In 1940 the Forest Service of the United States Department of Agriculture published a study of the Forest Resources of the Douglas Fir Region—No. 389. The study is voluminous so we are quoting only extracts that bear directly on the immediate question.

"In a century of operation, and 20 to 25 years of heavy cutting, the virgin commercial forests of the Douglas fir region have been exploited in a very uneven manner, with heavy cutting in the north and central parts of the region and little or no cutting in the southern part. As is shown by the type maps at the back of this publication, vast areas have been cut over on and near Puget Sound, Grays Harbor, and the Columbia River, and large areas of virgin timber remain in southern Oregon. Approximately 75 percent of the present cutover area (including 84 percent of that in Washington and 59 percent of that in Oregon) was logged to supply tidewater on Columbia River mills.

"During the period 1925–33, mills on tidewater and the Columbia River produced 85 percent of the lumber, 95 percent of the pulp, and practically all the veneer manufactured in the region."

Specifically referring to the three districts—Puget Sound, Grays Harbor, and Columbia River—the report has this to say:

Puget Sound

"Under present marketing conditions the existing raw material is sufficient to supply all the existing wood-using industries at present rates of consumption at least until 1953, and is probably sufficient to do so until 1963 if all species are used. However, disappearance of the open log market for Douglas fir would undoubtedly force certain sawmills to cease operation.

"Therefore, unless other species are substituted on a large scale for Douglas fir there is bound to be a reduction in the quantity of lumber sawed in the Puget Sound district during the period 1953–62.

"In the Puget Sound district pulp manufacture will increase in importance among the forest industries. The supply of pulpwood available in the Puget Sound district is sufficient to maintain the present pulp mills in this district until 1963 and probably much longer. However, in the future (particularly after the first decade) more and more of the logs used for pulpwood will be produced in logging operations intended chiefly to produce pulpwood, rather than as a by-product of logging for sawlogs. According to present indications, logging will have exhausted most of the stands of the Douglas fir types by the end of the second decade. In logging stands in which Douglas fir is a minor species or is lacking, it appears probable that production of sawlogs will usually be incidental to production of pulpwood."

Grays Harbor

"The sawmill industry in the Grays Harbor-Willapa Bay district will be able to go ahead on a reduced basis for one more decade and probably part of the second, but not much longer unless there is a decided increase in the use of hemlock, 'cedar,' and balsam firs for lumber. Inventory data and type maps for the district show that the future of this region is bound up in the pulp industry. With

raw material enough for greatly increased pulp production, this district needs additional pulp mills if all labor now used in the lumber industry is to be given employment in the future."

Columbia River

"The standing timber in this district now in availability class 1 is not sufficient to maintain the 1925–33 rate of log production until 1963. During the decade preceding 1935 the sawmills in the district cut 1½ billion feet of logs per year; if this rate of production continues, and if the pulp mills in the district continue to utilize between 300 and 350 million feet of logs per year, the sawmills and plywood industry will be pinched for raw material sometime between 1943 and 1952. It is assumed here that the annual rate of cutting depletion will be only slightly less in 1933–42 than in the period preceding 1933, that in 1943–52 it will average between 85 and 90 percent of the 1925–1933 rate, and that after about 1952 it will diminish abruptly."

The estimates in the study have been proven too optimistic. The reason is that during the war the national needs for lumber were so great that production was stepped up beyond the normal gait visualized when the studies were made.

Under pressure of defense needs Douglas fir mills on the western slopes of Oregon and Washington in 1950 sawed about 10.5 billion feet for the greatest production ever. In 1951, first quarter, 2,657,885,000 feet were cut, or 113.7 percent of the 1946–50 average. First figures indicate this rate of production has been substantially maintained with 10.3 billion cut in 1952.

The building boom which followed World War II is to some degree indicative that future wartime bemands could not be sustained with lumber produced in the United States. During this period, the strain increased prices on common fir construction lumber (No. 1 Common including 25 percent No. 2) from about $48 to $75 per M.

Notwithstanding this incentive to increased production to marginal mills, etc., great quantities of lumber were brought in from Canada.

British Columbia has made important contributions to the lumber supply in the Eastern States. We estimate that during the 18 months prior to June 1950 British Columbia furnished about 100 full cargoes of lumber. We ourselves received lumber on about 50 of these steamers. We have also materially increased our imports from Nova Scotia, New Brunswick, and Quebec. Notwithstanding Canadian contributions the aforementioned price increases reflected the strain on the established sources of supply on the Puget Sound and Columbia River.

Assuming a war in which Britain was a partner this Canadian lumber would not be available to the United States as Britain would need it. That has been the pattern in the past.

Our experience tells us, therefore, that what is needed is a broader base to support more extensive lumbering operations. This broader base must consist of timber that can be reached and gotten out as all lumber manufacturing operations must be carried on within the framework of existing available timber supplies.

Opening up new timber districts takes time and plenty of it, especially in isolated territory where transportation is inadequate. Roads, bridges, railroads, harbors, manufacturing plants, machinery and logging equipment are some of the factors necessary to be developed and built in.

During wartime when all the production facilities are used to the utmost in prosecuting a war there is neither time nor materials available, nor labor for that matter. The Board will understand that the development of harbors alone requires time and this is indicative of the time required on other problems. Of interest in this respect is a statement of the United States Forest Department in the aforementioned publication:

Waterways and harbors

The bulk of the freight traffic on rivers and harbors of this region consists of forest products. Public development of waterways and harbors is based to a great extent on quantity of tributary timber. Future work should be integrated with sustained-yield plans.

"Future exploitation of timber south of the Columbia River district depends chiefly on improvement of shipping facilities. Some projects now under consideration by the United States engineers, for example, canalization of the Willamette River and improvements on the lower Umpqua River, would stimulate logging in territory now undeveloped.

"In time, improvement of certain harbors in southern Oregon will be needed to remove some of the geographic disadvantages now holding back the timber in that territory." [Italic ours.]

We have exhaustively examined the rivers in southern Oregon and northern California such as the Rogue, the Windchuck, the Smith, and the Klamath, and we don't see much possibility of development of harbors on those rivers for commercial purposes other than fish boats. The seasonal flow of such rivers, the bar problems and the inadequate areas for harbors inside the bars lead us to discount the commercial practicability of any of these rivers.

The logic of our research has therefore inevitably forced us to Crescent City, Calif., and to Humboldt Bay.

The corporation has invested $2,250,000 in a combined project at Crescent City and Eureka, Calif.

1. A modern planing mill capable of producing 120,000,000 feet annually and a barge dock at Crescent City.

2. An oceangoing tug of 950 horsepower capable of towing converted LSM's carrying over 500,000 feet of finished lumber between the mill dock at Crescent City and the terminal at Eureka on Humboldt Bay.

3. Barge fleet comprised of six converted LSM's.

4. At Eureka, Calif., the corporation purchased 14 acres of waterfront property and converted same into a modern storage and transfer terminal.

5. Constructed a dock capable of handling the largest type general cargo vessels building today.

6. In conjunction with the Castle Sawmills (in which the Dutton Corp. has a substantial interest) a sawmill and 30-acre log pond have been erected and put into production adjacent to our mill at Crescent City. The purpose of the Castle Mill being to provide the planing mill with rough lumber. The latter project represents a further investment of approximately $1,100,000.

The combined operation—sawmill, planing mill, barging to Eureka, thence transfer to oceangoing steamers and shipment to the Atlantic coast provides the necessary channel by which a representative portion of the 104 billion board feet of virtually untouched timber in northern California and southern Oregon can be released into the flow of commerce.

Our research indicates that the timber supplies in that area tributary to Crescent City and Humboldt Bay are immense. This timber area stretches from the Rogue River south in Curry County, Oreg., Del Norte, Siskiyou, Humboldt, and Trinity counties in California. There is no railroad between Humboldt Bay and Coquille, Oreg. (a distance of 226 miles), and consequent movement by truck for the timber in that area at present is over mountainous highways to either point.

In the past the exploitation of this timber has been largely that of Redwood surrounding Humboldt Bay which moved to southern California by steam schooner and did not require harbor depths comparable to that of full-fledged oceangoing steamers.

The redwood grows generally on the coastal flats where it is very moist and in this whole district good construction quality fir and pine starts where the redwood leaves off; that is at the higher elevations. Relatively speaking, this fir and pine is practically untouched and can be opened up with economical marine transportation.

The forest resources of Curry, Del Norte, Humboldt, Siskiyou, and Trinity are truly enormous and generally not appreciated by the majority of lumbermen let alone the general public. The area has been a blind spot basically because the transportation difficulties have led lumbermen not to give it a second thought.

Exhibit B attached hereto in two parts shows the forest resources of the counties.

This brings us to Humboldt Bay as the logical deepwater port for full-sized oceangoing steamers. Humboldt Bay to our thinking is the only logical deepwater port on the entire California coast north of San Francisco and the Oregon coast from the California line to Coos Bay, Oreg. That is a distance of 395 nautical miles, and it represents the longest coast area in the United States at this time without a full-fledged deepwater harbor.

Properly developed in peacetime into a deepwater harbor, Humboldt Bay would add an invaluable alternate in our Nation's transportation system during wartime. The fact that millions of board feet of lumber poured out of Puget Sound and Columbia River during the last war does not alter the fact that a repetition of that performance in the event of another war is impossible in view of the depleted timber supply tributary to those areas. The drama of the steel producers in their recent search for new sources of raw material is becoming equally true of the large tidewater producers of lumber.

The work required to improve Humboldt Bay is necessarily a peacetime activity. For the work to be done in wartime would be virtually impossible because of the votal need for equipment and effort elsewhere in the war program.

The enormous resources of northern California and southern Oregon are bottled up for the lack of transportation. The nearest railroad north of Arcata on Humboldt Bay is a distance of 226 miles at Coquille, Oreg., or 172 miles to the northeast to Grants Pass. The area from Coquille, Oreg., and Grants Pass is served by branch lines of the Southern Pacific and to the south of Humboldt Bay by the Northwest Pacific. Crescent City is linked to Eureka by 85 miles of scenic highway with many steep grades and hairpin turns.

Neither the trucks nor the railroads under normal conditions are adequate to supply sufficient transportation to open up this vast territory. In wartime the demands for timber from this area would far outstrip the capacity of the present modes of transportation. Adequate water transportation out of Humboldt Bay is the only means by which demands for lumber sufficient for wartime needs can be met. Evidence of interest in Humboldt Bay is recorded further in remarks of Hon. Hubert B. Scudder of California in the House of Representatives January 14, 1951, carried in the Congressional Record:

"It is urgent that this harbor be developed in the interests of national defense and has been so recognized by Federal agencies charged with this responsibility. Today I have introduced a bill calling for the authorization which would permit the further development of this harbor and trust that the Congress in its wisdom will give preferential consideration of this project in light of the emergency which exists.

"One New York firm doing intercoastal business and hauling lumber from Humboldt Harbor advises me that if it must continue to operate under the limited facilities in which it is required to load at Humboldt to two-thirds capacity, then proceed to Portland Oreg., to top off its load to be shipped through the Panama Canal to the east coast, it will cost them an additional $100,000 a year.

"On two partial loads of lumber which the Federal Government purchased and shipped from Humboldt Harbor they saved in excess of $11,000 in freight alone and advised me that if they had not been held outside the harbor because of inclement weather and loading conditions they would have saved $30,000."

And in large increases in lumber shipments out of Humboldt Bay shown in figures compiled by the Eureka Chamber of Commerce:

"The number of cargoes and shipments by year follows. 1946, nil; 1947, 5 cargoes, 5,824,666 feet; 1948, 8 cargoes, 8,881,258 feet; 1949, 9 cargoes, 6,710,149 feet; 1950, 20 cargoes, 23,603,296 feet; 1951 to November 30, 25 cargoes, 40,432,164 feet.

"(Strike conditions prevailed in lumber mills from February 1946 until April 1948.)

"Of the shipments in 1951, 9 cargoes totaling 14,758,916 feet were shipped between January 1 and June 30; 16 cargoes totaling 25,673,248 feet from July 1 to November 30.

"Until the last 6 months of 1951 there were no lumber shipments into Humboldt Bay. Up to November 30 these have totaled 13 cargoes for a total of 5,930,709 feet" (via barge from Dutton mill at Crescent City).

It should be borne in mind that the use of the term "cargo" is relative. Had water depth been greater, the majority if not all of the foregoing cargoes would have been full cargoes of 5,750,000 feet net rather than part cargoes averaging only 1 million to 1½ million each.

The Dutton Corp. as a direct result of its program for the development of Crescent City and Humboldt Bay moved by barge during period August 1, 1951-January 1953, 31,399,913 feet from Crescent City to its terminal at Eureka. In the same period it shipped by oceangoing vessels 34,611,400 feet from Eureka to its east coast terminals. This footage was spread over 12 part cargoes. Had draft permitted loading full cargoes, the total would have been closer to 69 million feet. Actually, the vessels had to be topped off either in the Puget Sound, Columbia River, or Coos Bay districts. The additional time, backhauling, and port charges to the vessels ran from $5,140 up to as high as $12,260, averaging $8,500 a ship, or approximately $102,000 for the period. Losses such as these cannot be tolerated if the operation is to thrive and reach economic maturity. Noncompetitive shipping costs only serve to discourage new mills to pioneer in the development of the area. Intercoastal steamship companies (common carriers) who are fighting mounting operating costs for survival do not schedule ships to call at ports where they face delays to their vessels awaiting favorable tidal conditions and cargo limitations account insufficient water.

Summary

	Acres of forest lands	Board feet
Curry	1,037,398	9,480,283,000
Del Norte	350,000	11,844,000,000
Humboldt	1,614,000	45,919,000,000
Siskiyou	1,820,000	21,528,000,000
Trinity	1,149,000	15,614,000,000
Total	5,970,398	104,385,283,000

There are some basically important principles that cannot be lost sight of.

No. 1.—The timber has to be cut before it becomes overripe. The timber in this area generally is 150 to 200 years old. It differs in this respect from that in central Oregon which is about 300 years old, the difference accounted for by what is known in the Forest Service as ancient burns in the coast areas, some 150–200 years ago.

The 300-year timber in Oregon is too old and a great percentage is left in the woods because of conk or conky decay.

No. 2.—The big timber landlords are the Federal, State, and county governments and the revenues will accrue to such governmental bodies.

No. 3.—By virtue of the preponderant public ownership and the opportunity for all parties to start from scratch, this entire area will be developed on a sustained-yield basis in perpetuity. The Federal Government does not sell the land—it sells only the trees and thereby retains complete control.

No. 4.—There is nothing comparable to this in the United States.

No. 5.—The timber has been locked in because of inadequate transportation and the biggest locked-in landlord is the Federal Government itself.

The conclusions we draw are:

1. This country needs a braoder base in timber supply to offset the extreme decline in Washington and northern Oregon.
2. This broader base needs adequate transportation facilities and Humboldt Bay is a necessary and natural deep water outlet for this broader base.
3. Humboldt Bay is inadequate at present because the merchant fleet of the world consists of larger vessels with deeper draft. As an example, vessels built during World War I drew 25–26 feet whereas vessels built during World War II draw 28–31 feet.
4. Unless our main harbors can accommodate these deep draft vessels we are only going on one leg.
5. This is of major importance in times of war.
6. The timber is ripe and ready to cut.
7. The timber country is practically frontier country now. The population of Del Norte County for example is only 8,000 to 10,000.
8. Timber is the substantial natural resource in that area and proper exploitation will open up the country to immigration and employment.

Exhibit showing timber resources of Curry County, Oreg., and Del Norte, Siskiyou, Humboldt, and Trinity Counties in California:

TABLE 22.—*County board-foot volume by groups of species and ownership*

[In millions of board feet]

County	Pine			Redwood			Other species			All species		
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total
Del Norte	81	8	89	1,751	4,497	6,248	3,551	1,956	5,507	5,383	6,461	11,844
Humboldt	209	112	321	1,756	18,127	19,883	6,899	18,816	25,715	8,864	37,055	45,919
Siskiyou	3,024	2,972	5,996	.....	.....	.....	12,022	3,510	15,532	15,046	6,482	21,528
Trinity	3,293	1,306	4,599	.....	.....	.....	8,390	2,625	11,015	11,683	3,931	15,614
Total	6,607	4,398	11,005	3,507	22,624	26,131	30,862	26,907	57,769	40,976	53,929	94,905

Sources: California Counties, Forest Survey Release No. 4, issued by California Forest and Range Experiment Station in cooperation with Forest Service, Department of Agriculture, dated Mar. 1, 1946.

FOREST STATISTICS FOR CURRY COUNTY, OREG., FROM INVENTORY PHASE OF FOREST SURVEY

TABLE 1.—*Volume of timber, by species, for each ownership class*

[In thousands of board feet, log scale, Scribner rule, data corrected to May 1, 1933]

Species [1]	Private ownership	Public ownership							Total for county
		State		County	Indian, tribal and trust allotments	Revested land grants, Oregon and California, etc.	Federal, other than national forest, Indian, and revested land grants	National forest, available for cutting	
		Available for cutting	Reserved from cutting						
Old-growth Douglas fir:									
Trees over 40 inches d. b. h.[2]	2,180,465	3,386	4,528	56,733	22,961	404	45,813	108,500	2,422,790
Trees, 20–40 inches d. b. h.[2]	1,113,427	11,014	2,348	27,296	9,140	249,454	27,807	3,344,803	4,785,289
Second-growth Douglas fir:									
Trees 20–40 inches d. b. h.[2]	559,114	773	1,957	23,999	2,591	51,521	45,916	----------	685,871
Trees 16–20 inches d. b. h.[2]	181,554	1,699	361	8,996	1,118	3,679	10,476	6,650	214,533
Large Sitka spruce, trees over 24 inches d. b. h.[2]	29,619	----------	----------	----------	----------	----------	----------	----------	29,619
Small Sitka spruce, trees 16–24 inches d. b. h.[2]	9,157	----------	----------	201	----------	----------	561	----------	9,919
Weeping spruce, trees over 16 inches d. b. h.[2]	----------	----------	----------	----------	----------	----------	----------	1,140	1,140
Large western hemlock, trees over 20 inches d. b. h.[2]	31,891	88	----------	525	----------	----------	66	3,422	35,992
Small western hemlock, trees 16–20 inches d. b. h.[2]	5,588	16	----------	100	----------	----------	12	----------	5,716
Western red cedar, live, trees over 16 inches d. b. h.[2]	10,950	----------	----------	100	----------	25	----------	494	11,569
Port Orford cedar, live, trees over 16 inches d. b. h.[2]	304,139	78	265	1,395	884	145	497	56,462	363,865
Incense cedar, trees over 16 inches d. b. h.[2]	----------	----------	----------	----------	----------	10	----------	200	210
Dead cedar, trees over 16 inches d. b. h.[2]	8,290	----------	----------	----------	----------	----------	----------	1,668	9,958
Large ponderosa (Jeffrey) pine, trees over 22 inches d. b. h.[2]	1,840	----------	----------	10	----------	4,135	----------	19,420	25,405
Small ponderosa (Jeffrey) pine, trees 12–22 inches d. b. h.[2]	205	----------	----------	----------	----------	460	----------	2,160	2,825
Sugar pine, trees over 12 inches d. b. h.[2]	8,542	300	----------	20	30	13,507	----------	99,620	122,019
White fir and lowland white fir, trees over 16 inches d. b. h.[2]	182,675	212	----------	2,736	1,334	----------	446	710	188,113
Noble and Shasta fir, trees over 16 inches d. b. h.[2]	300	----------	----------	----------	----------	----------	----------	25,785	26,085
Redwood, trees over 16 inches d. b. h.[2]	15,980	----------	----------	----------	----------	----------	----------	41,400	57,380
Red alder, trees over 12 inches d. b. h.[2]	9,041	14	17	210	88	----------	372	850	10,592
Oregon white oak, trees over 12 inches d. b. h.[2]	746	1	2	39	4	----------	23	1,698	2,513
California black oak, trees over 12 inches d. b. h.[2]	550	----------	----------	----------	----------	----------	----------	4,844	5,394
Canyon live oak, trees over 12 inches d. b. h.[2]	----------	----------	----------	----------	----------	----------	----------	260	260
Tan oak, trees over 12 inches d. b. h.[2]	134,623	610	255	3,532	1,380	1,010	5,027	286,997	433,434
Black cottonwood, trees over 12 inches d. b. h.[2]	400	----------	----------	----------	----------	----------	----------	----------	400
Bigleaf maple, trees over 12 inches d. b. h.[2]	4,930	12	14	188	59	----------	272	----------	5,475
Madrone, trees over 12 inches d. b. h.[2]	4,645	11	12	179	66	110	234	3,895	9,152
Oregon ash, trees over 12 inches d. b. h.[2]	140	----------	----------	4	1	----------	7	----------	152
California laurel,[3] trees over 12 inches d. b. h.[2]	12,207	42	25	318	101	----------	460	400	13,553
Chinquapin, trees over 12 inches d. b. h.[2]	854	1	2	31	10	----------	112	50	1,060
Total	4,811,872	18,257	9,786	126,612	39,767	324,460	138,101	4,011,428	9,480,283

[1] In addition to the species for which sawtimber volume estimates were obtained, western white pine and lodgepole pine are known to occur in inconsequential quantities in this county.

[2] D. b. h. = Diameter at breast height.

[3] California laurel is locally called Oregon myrtle.

TABLE 2.—*Area in acres of all forest cover types, by ownership classes*

[Date corrected to May 1, 1933]

Definition of types	Private ownership	Public ownership							Total for county
		State		County	Indian, tribal and trust allotments	Revested land grants, Oregon and California, etc.	Federal, other than national forest, Indian, and revested land grants	National forest, available for cutting	
		Available for cutting	Reserved from cutting						
Nonforest land other than agricultural	4,725		35	107		545	95	2,300	7,807
Agricultural (cultivated and cleared pastures on operated farms)	49,724	105	145	560	110	340	400		51,384
Oak-madrone (a forest containing over 60 percent oaks or madrone	9,752	450	55	435	210	2,920	4,495	60,322	78,639
Douglas fir (a forest containing over 60 percent Douglas fir):									
Large old growth, over 40 inches d. b. h.[1]	74,289	210	240	2,175	1,345		1,760	4,806	84,825
Small old growth, 20 to 40 inches d. b. h.[1]	45,718	755	145	1,165	255	26,210	1,520	258,548	334,316
Large second growth, 20 to 40 inches d. b. h.[1]	35,785	70	40	1,975	165		4,465		42,500
Small second growth, 6 to 20 inches d. b. h.[1]	60,966	175	280	4,230	700	160	7,110	16,970	90,591
Seedlings and saplings, up to 6 inches d. b. h.[1]	3,006		150	20	25	260	835	14,705	19,001
Sitka spruce (a forest containing over 50 percent Sitka spruce):									
Large, over 24 inches d. b. h.[1]	1,190								1,190
Small, 6 to 24 inches d. b. h.[1]	2,710			35			100		2,845
Western hemlock, small (a forest containing over 50 percent western hemlock, 6 to 20 inches d. b. h.[1])	190			65					255
Port Orford cedar, large (a forest containing over 20 percent Port Orford cedar, and over 30 inches d. b. h.[1])	12,215			40			5	810	13,070
Cedar, small (a forest containing 40 percent or more of either western red or Port Orford cedar, and under 24 inches or 30 inches d. b. h.[1],) respectively	1,595	15	80	65					1,755
Ponderosa pine (a forest containing over 50 percent ponderosa pine), large, over 22 inches d. b. h.[1]	390					190		8,288	8,868
Sugar pine, large (a forest containing 20 percent or more of sugar pine and over 22 inches d. b. h.[1], this type mapped only outside the boundaries of national forests)	320					255			575
Fir-mountain hemlock (a forest containing over 50 percent of either noble, silver, or shasta fir and/or mountain hemlock):									
Large, over 16 inches d. b. h.[1]						440		674	1,114
Small, under 16 inches d. b. h.[1]						200		30	230
Lodgepole pine (a forest containing over 50 percent lodgepole pine): Large, over 12 inches d. b. h.[1]	835								835
Small, under 12 inches d. b. h.[1]	4,090	50		90			690	6,408	11,328
White fir (a forest containing over 50 percent white fir):									
Large, over 20 inches d. b. h.[1]	1,080			80					1,160
Small, under 20 inches d. b. h.[1]	2,840			40					2,880

Hardwoods (laurel, alder, madrona, and/or maple predominating)	6,980	90	20	20	40		160		7,310
Redwoods (a forest containing over 80 percent redwood)	440					120		1,057	1,617
Old cutovers, not restocked (clearcut prior to 1920)	449							2,113	2,562
Recent cutovers (clearcut since January 1920)	3,190			100			15		3,305
Deforested burns (any nonrestocked burn, not cut over) [2]	27,625	235	175	1,420	285	8,590	9,145	142,359	189,834
Noncommercial rocky areas	923	475	95			740	35	75,334	77,602
Total	351,027	2,630	1,460	12,622	3,135	40,970	30,830	594,724	1,037,398

[1] D. b. h=diameter breast height.
[2] Of the 51,384 acres of type 3, 9,120 acres are type 37-3A, deforested burn periodically burned and used for grazing, and 16,775 acres are type 37-3AB, open prairie land.

TABLE 3.—*Area in acres of generalized forest types, by ownership classes*

[Data corrected to May 1, 1933]

Definition of types	Private ownership	Public ownership							Total for county
		State		County	Indian, tribal and trust allotments	Revested land grants, Oregon & California, etc.	Federal, other than national forest, Indian, and revested land grants	National forest, available for cutting	
		Available for cutting	Reserved from cutcutting						
Nonforest land types: Survey types 2 and 3 [1]	54,449	105	180	667	110	885	495	2,300	59,191
Hardwoods (laurel, alder, madrona, and/or maple predominating): Survey type 31	6,980	90	20	20	40	----------	160	----------	7,310
Coniferous timber types (over about 20 inches d. b. h.[2]): Survey types 6, 7, 8, 11, 14, 18, 20, 20A, 23, 29, and 32 [3]	171,427	1,035	425	5,435	1,765	27,215	7,750	274,183	489,235
Coniferous timber types (from 6 to 20 inches or 24 inches d. b. h.[2]): Survey types 9, 12, and 15:									
On cutover areas	3,675	15	----------	485	----------	40	330	----------	4,545
On old burns	60,191	160	280	3,845	700	120	6,880	16,970	89,146
Total	63,866	175	280	4,330	700	160	7,210	16,970	93,691
Coniferous timber types (from 0 up to 6 inches d. b. h.[2]): Survey types 10, 13, and 16:									
On cutover areas	750	----------	----------	15	----------	----------	15	----------	780
On old burns	2,256	----------	150	5	25	260	820	14,705	18,221
Total	3,006	----------	150	20	25	260	835	14,705	19,001
Conferous timber types (from 0 up to 16 and 20, 24, or 30 inches d. b. h.[2]): Survey types 19, 24, and 30:									
On cutover areas	1,440	15	----------	65	----------	----------	----------	----------	1,520
On old burns	2,995	----------	80	40	----------	200	----------	30	3,345
Total	4,435	15	80	105	----------	200	----------	30	4,865
Noncommercial types: Survey types 4, 25, 26, 33, and 38	15,600	975	150	525	210	3,660	5,220	142,064	168,404
Recent cutovers (clearcut since January 1920): Survey type 36	3,190	----------	----------	100	----------	----------	15	----------	3,305
Old cutovers nonrestocked, and deforested burns: Survey types 35 and 37	28,074	235	175	1,420	285	8,590	9,145	144,472	192,396
Total	351,027	2,630	1,460	12,622	3,135	40,970	30,830	594,724	1,037,398

[1] Of the 59,191 acres of types 2 and 3, 25,895 acres are deforested burn and open prairie land used for grazing.
[2] D. b. h.=diameter breast height.
[3] Included in the type 7 are 199 acres "National forest available" having a stand the majority of which is weeping spruce (*Picea Breweriana*).

STATEMENT OF WILLIAM H. FOSS, TRAFFIC MANAGER, A. C. DUTTON LUMBER CORP., POUGHKEEPSIE, N. Y.

My name is William H. Foss. I am traffic manager of the A. C. Dutton Lumber Corp. of Poughkeepsie, N. Y., and vice president of Palantic Steamship Co., Inc., a wholly owned subsidiary of Dutton. Palantic serves Dutton as a contract carrier of its lumber from Pacific coast ports to Dutton terminals on the Atlantic coast via the Panama Canal.

The Dutton interest in the development of west coast timber resources predates the opening of the Panama Canal. With the opening of that project in 1914, Mr. A. C. Dutton introduced the first cargo of west coast fir into the Atlantic coast market. Dutton cargoes have continued without interruption except for the two World Wars to the present.

I do not wish to repeat that which is contained in the brief just handed to each of you other than to present for your consideration a summary of the facts contained therein, and in addition thereto I should like to present statistics supplied by the National Forest Service which shows the substantial revenue which will accrue to the benefit of the Federal Government and, in lesser degree, to the State and municipal governments through a sustained-yield cutting of the public-owned lands in the Six Rivers National Forest in northern California, and in Curry County, Oreg. Indications are that stumpage revenue on Dutton volume alone will be sufficient to pay for the Humboldt Bay project as presently programed, and well over the amount necessary annually to provide proper maintenance.

A loss of $102,000 over a 30-month period was occasioned by the insufficient water depth in Humboldt Bay to permit maximum loading of lumber, with the result that partial cargoes were loaded and then the ships sent north to other ports to complete loading. But I am not stressing the loss to private interests as much as I am the loss to the area and to the Federal Government and to the Nation because this valuable timber remains locked up for lack of an effective outlet. These would have been full cargoes, and they will in future be full cargoes, if the water in Humboldt Bay is made deep enough for maximum loading.

The impact of the appropriation sought goes far beyond the deepening of Humboldt Bay to 40 feet on the bar and 30 feet in the channel. It reaches back into an area of 6 million acres in Humboldt, Del Norte, Trinity, and Siskiyou Counties in northern California and Curry County in southern Oregon, a territory primarily tributary to Crescent City and Humboldt Bay containing 104.3 billion board feet of timber, over 80 percent of which is publicly owned. This timber cannot find an outlet in the absence of adequate rail service and the absence of deep-water port to accommodate modern oceangoing vessels drawing from 27 feet 9 inches to 29 feet under full load. The escalating costs of ship operation—crew, salaries, cost of stevedoring, and assessorial charges leave no choice to the operators to load other than full cargoes.

In summary, let us consider the facts in the order in which they present themselves:

1. Timber resources in the Puget Sound and Columbia River area are diminishing.

2. The search for new sources of timber supply has led to exploration of the resources of Siskiyou National Forest in Curry County, southern Oregon, and the Six Rivers National Forest in northern California.

3. The surveys of the National Forest Service and the California Range and Experiment Station indicate the availability on a sustained-yield basis of over 154 million board feet per year in perpetuity.

4. This vast source of virtually untouched timber exists solely because of the lack of adequate transportation.

5. Branch rail lines servicing this area are separated by 226 miles of mountainous territory.

6. A deep-water harbor does not exist to provide an outlet by sea between San Francisco and Coos Bay, a distance of about 400 miles, or roughly the same as the distance from Portland, Maine, to the Delaware breakwater. I have prepared a sketch map which shows the ports located on this 400-mile stretch on the Atlantic coast as compared with the absence of ports for a similar stretch on the Pacific coast.

7. Humboldt Bay properly developed is the logical outlet by sea for timber in this area. Humboldt Bay, as it presently exists, does not have sufficient water over the bar or in the channels to provide proper access for oceangoing vessels loaded to full capacity and drawing 27 feet 9 inches to 29 feet. The escalating costs of operating vessels, crew wages, cost of stevedoring and accompanying port charges leaves no choice to the operators but to demand that full cargoes be carried.

8. Evidence clearly indicates that in the time of war or national defense that the authorities will look in increasingly large measure to timber sources tributary to Humboldt Bay.

9. It is further acknowledged that this facility must be developed in peacetime if it is to be of value in times of national emergency.

In conclusion the point I would like to make is that this is not a venture that will benefit only private interests. The big timber landlords are the Federal Government, the State and county governments, and the stumpage revenues will accrue to them. This is a project in perpetuity in the sense that there will be a sustained-yield because the Federal Government does not sell the land but only sells the trees and retains complete control which is invariably accompanied by a process of reforestation while the process of self-liquidation continues.

Appendix A is attached hereto which will show that on the basis of Dutton's business alone the Government will receive through stumpage rights the cost of the Humboldt Bay project. In addition the net profit to the Government on Dutton business in perpetuity should average at least $300,000 a year. There are not many projects that are self-supporting and on as broad a basis as this one.

You will find in nine tables accompanying my statement the mathematical proof that this is a splendid financial deal for the Government. The tables show that the Government during the first 40 years will make a profit of $674,000 per annum, based on a revenue of $5 per 1,000 feet (an approximate actual figure based on actual sales, and a cost to the Government of 62 cents per 1,000 feet.)

Timber consultants advise that the timber behind our Crescent City operation including Siskiyou National Forest in Curry County, Oreg. is 80 percent Government owned. We plan ultimately to operate at the rate of 120 million feet annually. Therefore, 96 million feet (80 percent of 120 million) at a stumpage rate of $5 per thousand—less 62 cents per thousand (cost of road construction and betterment amortized over the net recoverable volume) or $4.38 per thousand would indicate $420,480 per year accruing to the Federal Government in perpetuity. This substantial source of revenue is indeed unusual particularly when considered in its relationship to the project which we are presently considering together which carries an initial cost of $410,000, and $49,500 in annual maintenance.

I know this committee gets many assurances on the subject of self-liquidation, but here you have a situation where the timber supply to the north is rapidly wearing out; you have figures from Government sources showing that in northern California, and there alone, is a huge remaining stand of timber; you have a substantial company which has proved its faith in the matter by a substantial investment of approximately $3,350,000, and you have a deepwater port which sorely needs development anyway because no other is practically available. In addition, you know that the Government will derive income because no timber can be cut without payments to the Government. I submit that this takes the present case out of the usual category of cases.

California needs this; the Federal, State, and local Governments need the revenue; the Nation needs the lumber. The Dutton Corp. is merely the instrument for performing the physical service.

APPENDIX A

Table 1 indicates Six Rivers National Forest by county, acreage total being 1,408,368 acres.

Table 3 shows the acreage by districts established in the Six Rivers National Forest.

Table 5 establishes old-growth timber volume (ready to cut) by working circles, the yearly allowable cut in each working circle during the first 40-year cycle.

Table 6 shows the working-circle summary and an allowable cut of 154 million feet of Government timber and 26 million feet of private timber.

Table 8 shows the cost to the Government of primary access roads. (The timber itself finances these roads and such costs are paid for in the price received for the timber in the first cutting cycle of 40 years.)

Table 9 shows these costs applying to the first cycle of 40 years in the terms of thousand feet of timber available. The average cost (col. 7) is 62 cents [1] per thousand feet). The price which the Government has been receiving is about $5 [1] per thousand feet. On the basis of an allowable cut of 154 million feet, the

[1] The Forestry Department is unable to furnish figures which would be representative of 1953 costs. The figures appearing in the above tables were prepared in 1946. However, the increase in road-building costs have been equaled if not exceeded by the increase in stumpage. Government timber sales in this area have increased in cost, ranging from $8 to $16 per thousand feet.

earning to the Government after expenses for roads have been deducted would be $674,520 per year. 154 million feet, at $4.38 ($5 less 0.62 cents).

SIX RIVERS NATIONAL FOREST PROSPECTUS

TABLE I.—*National forest area by counties*

[Acres]

County	Net national forest	Alienated	Total
Del Norte	386,054	47,577	433,631
Humboldt	316,305	65,598	381,903
Trinity	212,181	54,656	266,837
Siskiyou	11,505		11,505
Total	926,045	167,831	1,093,876
NRPU (Del Norte)	14,492		14,492

[1] Lands are not national forest but are Government-owned, acquired by purchase under the Weeks Act and are administered by the Forest Service.

TABLE III.—*Area by districts*

[Acres]

Ranger district	Net national forest area	Alienated	Total
Gasquet	308,138	46,942	355,080
Orleans	210,777	14,389	225,166
Lower Trinity	289,970	52,080	242,050
Mad River	217,160	54,420	271,580
Total	1,026,045	167,831	1,093,876
NRPU	14,492		14,492

TABLE IV.—*Primary values, Government land*

	Acres
Recreation and wildlife	59,392
Livestock range	108,080
Timber production	758,573
Total	926,045

NOTE.—All lands have primary watershed values and are managed accordingly.

TABLE V.—*Old-growth timber volume by working circles (operable)*

Working circle	Gross area	Net volume Government	Million feet board measure private	Old-growth total	Yearly allowable	
					Government cut	Private cut
					Million feet	*Million feet*
Gasquet district:						
Middle fork	160,810	1,030	333	1,363	11.7	3.0
South fork	194,270	1,672	254	1,926	18.9	2.3
Total	355,080	2,702	587	3,289	30.7	5.3
Orleans district:						
Blue Creek	64,952	1,268	79	1,347	12.6	.4
Bluff Creek	56,546	1,571	37	1,608	15.0	.2
Orleans	103,668	2,257	12	2,269	17.1	.4
Total	225,166	5,096	128	5,224	44.7	1.0
Lower Trinity district:						
Horse Linto	81,109	1,559	80	1,639	18.9	.9
Lower Trinity	160,941	2,084	1,852	3,936	27.0	16.0
Total	242,050	3,643	1,932	5,575	45.9	16.9
Mad River district:						
Mad River	148,964	666	88	754	13.5	2.1
Eel River	122,616	489	32	521	7.6	.8
Total	271,580	1,155	120	1,275	21.1	2.9
NRPU Requa	14,592	750	----------	750	12.0	----------

Area primarily valuable for timber production, 758,573 acres.

TABLE VI.—*Summary of timber volume by districts*

District	Net volume millions of feet board measure			Old growth, allowable cut	
	Government	Private	Total	Government	Private
Gasquet	2,702	587	3,389	30.7	5.3
Orleans	5,096	128	5,224	44.7	1.0
Lower Trinity	3,643	1,932	5,575	45.9	16.9
Mad River	1,155	120	1,275	21.1	2.9
Total	12,596	2,767	15,363	142.4	26.1
NRPU	750	----------	750	12.0	----------

EXPLANATION OF COLUMNS, TABLE VIII

Columns (1) and (2): Miles of road betterment and construction required to open timbered areas, construction of which should be done by the Government in order to maintain competitive enterprise and not create monopolies for those who can afford large capital outlays.

Column (3): Cost of work listed under columns (1) and (2) based on 1948 cost indexes of the American Association of Contractors as adjusted for local conditions and local experience.

Columns (4) and (5): Miles of road which could be constructed by timber operators on short-term sales, the cost of which would be amortized by reduced stumpage prices.

Column (6): Cost of work listed under column (3) above.

Column (7): Cost to the Government to perform engineering surveys and road location which would be necessary for operator-built roads under columns (4), (5) and (6).

TABLE VIII.—*Timber access road requirements by working circles, Six Rivers National Forest*

Working circle	Miles by Government			Miles by operator			Engineering cost
	Betterment	Construction	Cost	Betterment	Construction	Cost	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Middle Fork, Smith River				8.0	13.0	$357,300	$39,700
South Fork, Smith River	11.0	8.0	$997,500		23.0	930,300	103,300
Blue Creek		6.0	282,000		9.0	340,200	37,800
Bluff Creek		4.5	135,000		17.0	686,700	76,300
Orleans	8.0	11.0	425,000		8.5	497,500	57,500
Klamath block	8.0	13.0	490,000		4.0	216,000	24,000
Horse Linto	1.0	1.0	130,000	2.0	46.0	1,233,000	137,000
Lower Trinity:							
Willow Creek block				7.5	23.0	435,600	48,400
Grouse Creek block		27.0	584,000		15.5	459,000	51,000
Mad River		9.5	335,000		6.5	162,000	18,000
Eel River				26.0	19.0	954,000	106,000
Total	28.0	80.0	[1] 3,378,500	43.5	184.5	[2] 6,271,600	[3] 699,000
Hyampom outlet	31.5	[4] 33.0	2,710,000				132,000

[1] $337,850 per year for 10 years.
[2] $156,790 per year for 40 years.
[3] $17,475 per year for 40 years.
[4] 27 miles double-tracking construction miles shown under Grouse Creek.

EXPLANATION OF COLUMNS, TABLE IX

Columns (1) and (2): Net volume of merchantable timber available for cutting during the first cutting cycle of about 40 years. Cull and other loss factors have been deducted from gross volumes to reflect a net recoverable volume of lumber.

Columns (3) and (4): Net volume annual cut allowable under sustained yield management during the first cutting cycle which average 40 years.

Columns (5) and (6): Number of miles of primary access road construction and betterment required to harvest the timber crop.

Column (7): Cost per thousand board feet of timber. Column (6) amortized over the net recoverable volume, Government and private.

Column (8): Cost to Federal Government for roads which must be constructed by the Government plus engineering cost to Government for roads which can be constructed by operators under sales contracts.

Column (9): Cost per year to the Government for access road program for first 10 years. This includes all the road construction costs by the Government plus engineering.

Column (10): Cost per year to the Government after the first 10-year period, and during the first 40-year cutting cycle. This is engineering costs only and contemplates operator-built roads.

TABLE IX. —*Timber volumes and access-roads requirements by working circles, Six Rivers National Forest*

Working circle	(1) Net volume, Government	(2) MM board feet, private	(3) Net volume, Government	(4) Annual cut, private	Primary access road construction and betterment		(7) Cost per M. b. m. to timber	(8) Cash cost construction and engineering to Government	(9) Per annum cost	
					(5) Miles	(6) Cost			First 10 years	Next 30 years
Middle Fork, Smith River	1,030	333	11.7	3.0	21.0	397,000	0.29	39,700	1,000	1,000
South Fork, Smith River	1,672	254	18.9	2.3	42.0	2,030,500	1.06	1,100,800	87,470	2,580
Blue Creek	1,268	79	12.6	.4	15.0	660,000	.49	319,800	29,150	950
Bluff Creek	1,571	37	15.0	.2	21.5	898,000	.56	211,300	15,400	1,900
Orleans	2,257	12	17.1	.4	27.5	1,000,000	.44	482,500	43,900	1,400
Klamath block [1]	1,367	21	14.4	.4	25.0	730,000	.54	514,000	49,600	600
Horse Linto	1,559	80	18.9	.9	50.0	1,500,000	.92	267,000	16,420	3,420
Lower Trinity:										
Willow Creek block	1,371	926	18.0	7.9	20.5	484,000	.21	48,400	1,210	1,210
Grouse Creek block	713	926	9.0	8.1	42.5	1,094,000	.67	635,000	59,680	1,280
Eel River	489	32	7.6	.8	45.0	1,060,000	2.03	106,000	2,650	2,650
Mad River	666	88	13.5	2.1	16.0	515,000	.68	353,000	33,950	450
Total	13,963	2,788	156.7	26.5	326.0	10,368,500	.62	4,077,500	340,430	17,440

[1] On Klamath North Fork but tributary to Orleans W. C.

SHIPPING DIFFICULTIES

Mr. Foss. There are a couple of things that I would like to bring out in particular.

My name is William H. Foss. I am traffic manager of the A. C. Dutton Lumber Corp., of Poughkeepsie, N. Y.

For 35 years our main source of supply has been large tidewater mills located on Puget Sound in the Columbia River area. It is increasingly difficult for us to put cargoes up there today.

We used to have 3 cargoes a month and now it takes 2 months to accumulate 1.

The last timber resource which is in California and southern Oregon is primarily there because of lack of transportation to get it out.

The revenue to the Federal Government on Dutton business alone—and we have just invested in the last 3 years, $3½ million in a new planing mill, barging equipment, to get the lumber at Crescent City, plane it and barge it to Eureka on Humboldt Bay, where our steamers pick it up and bring it up intercoastally to our Atlantic coast terminal.

Due to lack of water, we can only go to a certain height and it costs us $8,000 to $12,000 a ship to top it up to Coos Bay.

Senator ELLENDER. Is this loss of revenue that you speak of due to the fact that the timber that is owned by the Government cannot be manufactured or sold?

TOTAL TIMBER IN CALIFORNIA

Mr. Foss. That is correct, sir.

There are 184 billion feet of timber in northern California. Eighty percent of it, according to the survey made by the Forest Service, is publicly owned. The revenue to the Federal Government on Dutton business alone, from stumpage, on our new mill capacity here—and if you are interested, here is a picture of the new operation—that mill is built to cut 120 million feet a year.

And on that yield the stumpage will average from $300,000 to $420,000 a year in perpetuity.

This project, which would increase the water depth from the project now of 30 feet across the bar to 40 feet, costs, according to the engineers, about $110,000 for dredging, with a maintenance cost of $49,000 a year.

BENEFIT TO FEDERAL GOVERNMENT

Now, the stumpage accruing to the Federal Government, the Forest Service, on our business alone, will amount to a maximum of $420,000 a year, which is ample to pay for the cost of this project the first year.

The Government owns the timber, and it is cut on a sustained yield basis. So that this accrues each and every year to the Federal Government.

We have here a project that not only pays for itself, gentlemen, but means a source of additional revenue to the Federal Government.

Senator ELLENDER. Would you be able to cut more timber than you are now selling?

Mr. Foss. Yes; very definitely. Our mills started in operation 1 year ago, and we are still limping around on 1 leg. We are only operating one shift. The mill is built to operate on three shifts, but

we can't move out the tonnage out of Humboldt Bay, and, therefore, we cannot operate the mill at full capacity.

We are just one of the new mills.

Senator ELLENDER. Did you not foresee that before you built your mill there?

Mr. Foss. We realize that, sir, and we expect to have these appropriations coming along, as the mill progressed that the water would be there.

The engineers have been extremely helpful and have done everything up to the limit that they are able to do.

We are forced into it as a result of the survey. The timber supply on the Columbia River-Puget Sound area is greatly diminished.

FOREST SERVICE SURVEY

The Forest Service survey in 1950 reported that on the basis of a 10-year cut between 1925 and 1935, of 1½ billion feet, by 1953 the present cut rate would start to diminish and by 1963 the saw logs would be unavailable.

Now, during 1952, the production jumped from 1½ billion to 10½ billion cut.

So the most optimistic people that made the survey were greatly misled.

Due to the war effort and to the demands for lumber in the East here after the war, this cut has jumped to the point now where the timber adjacent to the tidewater mills is cut off, and they are forced to go farther and farther back by truck to bring the saw logs down to the mills.

It is becoming uneconomical, and, since 1936, over 70 of these tidewater mills have closed down over this period of years, due to lack of saw logs.

Grace Harbor is a pulp economy today. The sound area is rapidly developing into a pulp and paper economy. It is no longer a sawmill area.

Senator ELLENDER. Would this facility be for your exclusive use?

Mr. Foss. No, sir. There are, I believe, 6 to 10 new plywood mills in this northern California area already.

Senator ELLENDER. It is all wrapped up in the manufacture of lumber, is it?

Mr. Foss. Everyone is coming down from up North into northern California today because here we have 104 billion feet of virgin timber.

As a matter of fact, the timber in southern Oregon is 300 years old. It has never been cut. It is 104.3 billion feet.

Senator KNOWLAND. Thank you very much for your statement, sir, and your full statement will appear in the record.

Mr. Foss. Thank you.

Representative SCUDDER. Thank you, Mr. Chairman.

HUMBOLDT BAY, CALIF.

(Subsequent to the hearing the committee received the following telegram from Mr. L. J. Haefner, vice president, Firemans Fund Insurance Co.)

SAN FRANCISCO, CALIF., *May 18, 1953.*

Hon. WILLIAM F. KNOWLAND,
Senate Office Building, Washington, D. C.:

We understand House and Senate Appropriation Committees are presently considering Humboldt Bay, Calif., improvement project, Public Law No. 549, 82d Congress. Siskiyou and Six Rivers National Forest in Curry County, Oreg., and northern California, respectively, provide a large and relatively untouched source of timber not available presently because of inadequate transportation facilities either by rail or water from this area to consuming market. From Six Rivers National Forest alone there is available 154 million board-feet per year in perpetuity. United States engineer confirms advisability of this project and able to commence work immediately and as project self-liquidating to the Federal Government in that loggers buy timber from national forest and return the land to the forest and it is estimated in the first 40 years after project completed Federal Government will receive $674,000 per year from this source. Your favorable consideration of appropriation which calls for $410,000 Federal money to dredge Humboldt Bay and provide sufficient water over bars and channels for oceangoing vessels together with $49,000 annual maintenance money will be appreciated.

L. J. HAEFNER,
Vice President, Fireman's Fund Insurance Co.

Senator KNOWLAND. The committee has received a communication from Mr. A. J. Williams, secretary-manager of the Seaside Taxpayers Association, of Seaside, Calif., concerning the need for a deep-sea harbor at Monterey Bay, Calif. That letter will be placed in the record at this point.

(The communication referred to follows:)

SEASIDE TAXPAYERS ASSOCIATION,
Seaside, Calif., March 10, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee, Washington, D. C.

ESTEEMED SENATOR: California definitely needs another deep-sea harbor in Monterey Bay, Calif.

It is earnestly requested by both the Army and the Navy posts here, and it would be most suitable for further prosperity of the entire Nation.

Will you kindly read this letter to your committee at the next meeting, and advise us of your findings.

Sincerely,

A. J. WILLIAMS, *Secretary-Manager.*

BEACH EROSION STUDY, COAST OF CALIFORNIA

(Subsequent to the hearings the committee received the following letter from Mr. Warren T. Hannum, Director of Natural Resources, State of California.)

STATE OF CALIFORNIA, DEPARTMENT OF NATURAL RESOURCES,
Sacramento 14, Calif., May 19, 1953.

Hon. WILLIAM F. KNOWLAND,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: California, through this department with approval of the State Park Commission, has entered into agreement with the Beach Erosion Board, Corps of Engineers, United States Army, for investigation and study of erosion on the coast of California with specific coastal units to be taken up from time to time as need develops and local interests make application. Presidential order has in recent years interrupted the progress of these surveys but recently the local engineer agency received authority from the Chief of Engineers which permitted initiation of survey of beach erosion at Santa Cruz. San Diego County is also seeking initiation of survey along coast of that county. The sums required for these studies nationally is generally comparatively small in amount but essential in the planning of any corrective measures, in which the Federal Govern-

ment participates only to one-third the cost where publicly owned lands are involved. We recommend that your Subcommittee on Army Civil Functions of the Senate Appropriations Committee give due consideration to including a reasonable appropriation for such beach-erosion studies in cooperation with States concerned, who are required to contribute half the cost of such surveys.

I am informed that Mr. Spencer Smith, president of the American Beach and Shore Preservation Association, will appear before your subcommittee to testify on May 22 and I suggest your committee give careful consideration to his testimony as to my knowledge he has for many years been unselfishly active in advocating Federal participation in these matters in cooperation with the States.

Very truly yours,

WARREN T. HANNUM,
Director Natural Resources.

GATHRIGHT DAM PROJECT, JAMES RIVER, VA.

STATEMENT OF McNEILL

Senator KNOWLAND. Next we have the Gathright Dam project on the James River, Va.

You may proceed, Mr. McNeill.

Mr. MCNEILL. Mr. Chairman, Senator Robertson had been scheduled to introduce the Gathright delegation, as he has in previous years, but, as you probably know, he is down in Williamsburg with the president for the celebration of the signing of the Virginia resolution of independence. So he has asked me to introduce the chairman of the Gathright delegation.

This gentleman is a leading businessman in Lynchburg, and also he is a ranking officer of the Lynchburg Foundry Co., and he also has a long and distinguished record in the Republican Party in Virginia.

At the present time he also serves as the chairman of the Virginia State Port Authority. So far as I know, he is the first Republican who has held that position on the permanent commission in Virginia.

I won't take any more time, but I will present Mr. Fred W. McWane, who will introduce the rest of the delegation.

Senator KNOWLAND. I want to say, first of all, that Senator Robertson is a very honored member of our Appropriations Committee here and has been very much interested in these projects.

I know were it not for the fact that he is accompanying the President of the United States to Williamsburg today, that he would have been here personally.

We are glad to welcome you before the committee.

Mr. MCWANE. Thank you, Mr. Chairman.

LYNCHBURG CITYWIDE COMMITTEE ON THE GATHRIGHT DAM, LYNCHBURG, VA.

STATEMENT OF FRED W. McWANE, VICE CHAIRMAN

BACKGROUND OF PROJECT

Mr. MCWANE. It is very nice to be so graciously presented by the official assistant to the distinguished Senator from Virginia.

I am just going to cite very briefly the delegation that we have, and then I am going to ask Mr. Moomaw to make a presentation, so far as may be necessary, on the project.

Most of us were in Lynchburg when this matter was first presented some 7 or 8 years ago, and I would remind you that Lynchburg was

the home of Senator Carter Glass. His influence in economic matters is still there. We are rather conservative businessmen.

When we first got this report of the Army engineers, we employed a group of independent engineers to advise us as to proper procedure. They advised us it was a very sound proposition and that if we were interested in the flood-control properties, that we should proceed.

They are not the kind of people that believe in just spending. We are economically minded.

So we associated with a group farther upstream from Lynchburg on west to the beginning of the James River, and that is a group that is represented here today.

I am not going to speak farther on the merits of the project, but I would like the privilege of presenting Mr. B. C. Moomaw, Jr., who was for many years secretary of the Chamber of Commerce of Covington, Va., and has lived in Alleghany County right near this site all of his life. He is well able to present it, and with your permission I will present him.

Senator KNOWLAND. Mr. Moomaw.

GATHRIGHT DAM

STATEMENT OF B. C. MOOMAW, JR., COVINGTON, VA.

CURRENT STATUS OF PROJECT

Mr. MOOMAW. Mr. Chairman and gentlemen, this is the seventh year in which we have appeared before this committee in behalf of this project. We have tried to be very responsible and reasonable in our requests. We have been happy to defer to the necessities of the Korean war when it broke out. We have never been urgent or aggressive about the matter.

Our position has been that when it is appropriate, when it is the policy of the Congress to develop projects of this kind, we would like to have ours developed on its merits. And that is still our position.

The current status of the project is that last year we had $100,000 for advance planning, which money is now being spent by the Army engineers. It is considered that it will be necessary to have another $50,000 for this coming year to carry on this planning work in an orderly and proper manner.

We understand that that amount is included in the lump sum for planning money which is in the revised budget and it is for the purpose of having you confirm that appropriation that we appear before you here.

PROJECT DESCRIPTION

We would like to make just a very brief description of our project, and I have a crude map here which will give you some sort of idea as to the project.

This map, in white [indicating] is the drainage area of the James River in Virginia. Here is the Gathright project on the principal headwaters, tributary of the James, on the extreme western part of the State.

JAMES RIVER DEFECTS

The James River is tremendously important in the economic life of Virginia, but it has two very serious defects.

One is that it has tremendous floods, and the other is extremely low water. The flood damage has been very extensive throughout this area down to Lynchburg, and the Gathright Dam would take out out of the James River all of the floodwaters on the Jackson above and would have eliminated, in the past two most serious floods that we have had, in 1913 and 1936, would have eliminated the major damage to this entire area down as far as Lynchburg.

Beyond Lynchburg the flood effects will be practically negligible.

The increase in low-water stream flow which would be brought about by the regulation that this dam would provide would extend all the way down the river to Richmond, and it would benefit some half dozen larger communities and a very great number of smaller communities, and some half dozen very important industries.

This flow gets down now to an extreme low level of 60 cubic feet per second, and the dam at all times, during these critical low-water periods, will provide 410 cubic feet per second, which will make 6 times as much water at Covington, more than 2 times as much at Lynchburg, and an increase of 50 percent in Richmond.

To give you the extreme benefit down here at Richmond, which is just 250 river miles away, they get their water supply out of the James River, and it is very difficult to purify it for domestic use.

This project would be extremely helpful.

As it is now, during the critical water times there is not sufficient water in the river for the industries and the communities downstream. So that we have here a really critical flood condition and low-water condition, which this project would very substantially correct. It would correct our low-water condition to the point where we would always have enough water for industrial and municipal use.

It would tremendously benefit the flood condition down as far as Lynchburg.

ESTIMATED COST OF PROJECT

Senator ELLENDER. What is the estimated cost of the project? Do you know?

Mr. MOOMAW. The latest figures, I think, are $22,800,000-some.

Senator ELLENDER. Then this project is not for the purpose of developing electricity, is it?

Mr. MOOMAW. Yes, sir; there is a very important power factor in it, which is one of the things that helps to make up the economic ratio.

This project was submitted in a report about 7 years ago, and at that time, Col. Audrey Crews was the district engineer at Norfolk, which covers this area. Colonel Crews said at the time it was the best project on any of the Virginia rivers and one of the best in the East.

Its economic ration is 1 to 1.40 as of the present calculations. They change it from time to time with changing conditions.

This is really a good project. It will carry enormous benefits to a great variety of communities and municipalities and to industries and to individuals along the stream.

REPRESENTATIVE DELEGATION

We have with us here a very representative delegation, and I would like just to present them and to identify the interest of each as I introduce them to you.

You have already met Mr. McWane, who represents the manufacturing interests at Lynchburg.

I want to say that at Lynchburg, Mr. McWane's industry and another large foundry there, employing together more than 1,200 men during World War II, had an enormous use in connection with the defense problem at that time. They were almost wholly devoted to defense activities.

Next, Mr. John E. Hirsh, from Bath County, representing the Board of Supervisors of Bath County, in which the lake will be located, and whose people are termendously interested in the recreational aspects of the lake, which will be very, very advantageous.

Coming downstream from there, we have Hon. H. W. Robertson, mayor of the city of Covington, and Hon. Hale Collins, member of the House of Delegates of Virginia, and president of the Covington Chamber of Commerce.

These gentlemen represent Covington and Alleghany County.

POSSIBLE FLOOD DAMAGE

Covington is about 15 miles downstream from the dam. It is estimated by the Army engineers that a flood of the size of 1913, which is our biggest flood of record, would do about $3,700,000 worth of damage on the Jackson River there, the greater part of which would be at Covington.

So we are at an enormous flood hazard at Covington.

We had here with us a while ago—and he had to leave—Mr. Parker Buhrman, from Botetourt County, representing the board of supervisors from Botetourt County, our next county downstream, which has a very tremendous amount of very rich river bottom farmlands which have been terribly subject to damage from these floods.

Next we have Mr. John C. Oliver, attorney for the town of Bedford, which has a municipal powerplant on the stream which would be tremendously benefited by this regulation in the streamflow.

Incidentally, there are about 18 such plants downstream which would be benefited.

Also from Botetourt County we have Mr. J. C. Oliver, who is a member of the Bedford County Board of Supervisors and president of local 1013, United Paperworkers of America.

He represents the labor interests that are involved.

There are about five or six thousand people working in these industries along the river, who have suffered terribly, terrible work-loss damage from floods in times past, in some extreme instances, Mr. Chairman, going up to 3 months.

In that specific instance, the reduction in flood crest which this dam would have brought about would have eliminated that damage.

We have Mr. Robert D. Morrison, city manager for the city of Lynchburg, who represents the municipality, and whose city would be tremendously advantaged in their tremendous problem of handling their municipal sewage, which they are preparing to do at a cost to

themselves—the worst of it they are preparing to go to is a cost to themselves of approximately $4 million.

We have with us—and he was also unable to be here at this particular time—Mr. Alexander Hudgins, the executive secretary of Virginia Association of Electric Cooperatives, who represents the REA cooperatives that would be benefited by this project.

Gentlemen, that represents our presentation. We thank you very much for this hearing which you have given to us.

We have filed with you a prepared statement for the record, sir.

Senator KNOWLAND. That may go into the record in full at this point.

(The statement referred to follows:)

PREPARED STATEMENT ON THE GATHRIGHT DAM PROJECT ON THE JAMES RIVER IN VIRGINIA

To the Subcommittee on Civil Functions of the Appropriation Committee of the Senate:

Mr. Chairman and gentlemen; the people in the western half of the James River Basin have made a most careful study of the survey report of the Army engineers on the James and have selected the one project which would do the most good at the least cost, the Gathright Dam. This is the eighth year we have appeared before you on behalf of this project. Our delegations have always been made up of conservative business people or representatives of conservative governing bodies. We have, in our several communities, given intensive study to this project and are fully convinced of its value.

Last year the Congress appropriated $100,000 for advance planning, and this money is now being spent on the basic engineering work necessary to develop the project. The Army engineers have requested for this year an additional $50,000.

This amount is included in the budget in the sum for planning and if granted will be used to continue the engineering work on this project in an orderly manner.

We very earnestly hope for your favorable consideration of this matter.

There follows a statement prepared by our group which outlines the serious problems this project is designed to correct and the benefits that will be derived from it.

Respectfully,

FRED W. MCWANE,
Assistant to the President, Lynchburg Foundry Co. and Head of the Delegation for the Gathright Dam.

BRIEF OUTLINE OF THE GATHRIGHT DAM PROJECT FOR THE IMPROVEMENT OF THE JAMES RIVER IN VIRGINIA

Location.—The Gathright Dam is located on the Jackson River, one of the principal headwater tributaries of the James River in Virginia about 15 miles upstream from Covington.

Purpose.—This is a multipurpose project. Its features are flood control, increase in low water stream flow for municipal and industrial use, pollution abatement, manufacture of electric power, increase in the productive capacity of downstream plants and recreation.

Area.—The area primarily affected will be the western half of the James River Basin, extending from the dam to Lynchburg, a distance of 150 river miles. There will be important benefits to the municipal water supplies of the town of Scottsville and the city of Richmond which are east of Lynchburg.

Status.—This project has been given first priority by the United States Army engineers in their comprehensive plan for the development of the water resources of the James River Basin. It has been authorized by the Congress and has received an appropriation of $100,000 for advance planning. This money is currently being used by the Army engineers in the basic engineering work necessary for the development of the project. The engineers have requested an additional $50,000 to continue this work in an orderly and proper manner. This amount is included in the present budget in the sum of planning money requested by the engineers.

Importance of project.—The James River and its tributaries constitute the greatest system of inland waterways in Virginia. Much of its basin is highly developed. It furnishes water for municipal water supplies and for extensive industrial development. It is a vitally important factor in the economic life of the State.

It is, however, subject to conditions which greatly reduce its value and effectiveness. These are (1) an extremely serious flood hazard, (2) extreme low-water conditions caused by annually recurring dry seasons, and (3) pollution by industrial waste and municipal sewage.

The operation of the Gathright Dam would bring about marked improvement in each of these conditions, and would carry important benefits far downstream. The communities that would receive these benefits are Bath, Alleghany, Botetourt, Rockbridge, Amherst and Bedford Counties, the towns of Iron Gate, Eagle Rock, Buchanan, Glasgow, Big Island, Bedford, and Scottsville, and the cities of Covington, Clifton Forge, Lynchburg, and Richmond.

The following facts are presented to demonstrate the urgent necessity of this project and the economic justification for it. Statistical data are from the Review Report on the Gathright Reservoir of the Army engineers. Dollar figures are for March 1949 and have not been adjusted to present values, except as noted.

Present flood hazard.—The Jackson and James Rivers are characterized by wide variations in streamflow. Maximum flows of record at the stations given are as follows: Covington, 50,000 cubic feet per second; Buchanan, 100,000 cubic feet per second; and Lynchburg, 115,000 cubic feet per second. These maximum figures represent disastrous floods for the points given which cover about 135 miles of river.

The flood plain of the Jackson and James Rivers from Lynchburg west consists of several thousand acres of river bottom farming land. The Chesapeake & Ohio Railway parallels the river from the dam to Richmond, a distance of 275 river miles. Industrial, commercial, and residential properties located on the flood plain at Covington, Clifton Forge, Iron Gate, Eagle Rock, Glasgow, Big Island, and Lynchburg together with the farmlands were valued in March 1949 at $68,900,000. These are all subject to severe damage in such floods as those of 1913 and 1936 and to lesser damage from the smaller floods that occur every few years. Since March 1949 estimated values to the extent of $30 million have been added to those given above.

It is estimated (March 1949 values) that the recurrence of a flood as great as 1913 would cause damage in the Jackson River alone estimated at $3,700,000. Substantial additional damage would extend down the James to Lynchburg and beyond as it did in 1913. One serious item of damage not taken into account along with the damage to physical properties is the loss to labor engaged in the affected industrial plants. There are over 5,000 people employed in such plants. They have suffered serious loss of employment as a result of floods, in 1 extreme instance in 1 plant for a period of 3 months. Less serious instances occur more frequently. The resulting loss to labor is very substantial.

Estimated flood-control benefits.—The Gathright Dam would remove from any flood the waters of the Jackson River above the dam. The following table indicates the reduction in flood crests at the points indicated for two of our greatest floods of record.

Flood reductions from Gathright Dam only

Gaging point	Reduction stage	
	March 1936 peak	March 1913 peak
	Feet	*Feet*
Covington, above Dunlap Creek	6.0	9.0
Lick Run	4.3	7.7
Buchanan	4.5	9.0
Lynchburg	1.8	6.0
Scottsville	.8	2.6

Competent observers at the several points advise that such reductions in flood crest would have practically eliminated damage from these floods on the Jackson River and would have greatly reduced it on the James, especially at Lynchburg and to the rich agricultural lands in Botetourt County.

The engineers place on the flood control features of the project an annual value of $149,000.

Present low water condition.—The second bad feature of the river, seasonal low water, is a serious shortcoming of the stream and is a limiting factor to industrial and municipal development. Typical low flows of record for the indicated points are as follows: Covington 60 cubic feet per second, Balcony Falls 219 cubic feet per second, Lynchburg 245 cubic feet per second, Richmond 574 cubic feet per second.

At such times the flow is seriously inadequate to the industrial and municipal needs of the downstream communities. The stream is low and sluggish for its entire length. There are seventeen existing hydroelectric plants on the James whose production is seriously affected. Some of these are privately owned plants, serving some specific industry whose operations are severely hampered by the annual seasons of low water and reduced power. Purification of James River water for the Richmond municipal water supply becomes difficult and expensive.

Proposed increase in stream flow.—The operation of the Gathright Dam would release during these critical periods water sufficient to increase the flow at Covington from 60 cubic feet per second to 410 cubic feet per second, an increase of 225 million gallons a day. This would supply sufficient water for any present or future need. It would eliminate the worst phases of low water as far down, stream as Lynchburg and would materially improve conditions as far as Richmond.

The demand for water for industrial and municipal needs would be amply supplied and the quality of the water would be improved. Production of firm power by the hydro plants would be substantially increased.

One of the most valuable features of this project is the extent to which the increased quantity and quality of dependable water supply would permit the expansion of our present industries and encourage the location of new ones. This feature is not evaluated by the engineers.

In fact, although the increase in water supply benefits a half dozen communities and a half dozen important industries and restores recreational opportunities and affects favorably many thousands of people, the only valuation given by the engineers is the increase in output of existing downstream power plants which is valued at $135,000 annually.

Stream pollution.—The Jackson and James Rivers carry a substantial load of industrial waste and municipal sewage. This pollution makes the water difficult and expensive to rectify for municipal water supplies and for most industrial uses. It has destroyed the value of the stream for recreational use and has retarded the industrial development of the James River Basin.

State and local action.—These conditions are recognized as being bad and in need of correction. It is also recognized that the prime responsibility for correcting these conditions rests on those who are responsible for the pollution. This responsibility has been accepted by the State and municipal authorities and by the industries which have industrial wastes.

In 1946 the legislature passed a bill designed: (1) To prevent pollution from new sources; (2) to prevent increase in pollution from existing sources; and (3) gradually reduce pollution from existing sources.

The industries involved have spent in the past 7 years more than $5 million to reduce pollution and have made great progress in this direction. They are engaged in continuing activity with a prospect of even more important results in the early future.

The cities of Covington and Clifton Forge and Lynchburg and many of the smaller towns are being required to put in primary sewage treatment plants estimated to cost in excess of $4 million. The plant for the city of Richmond will cost at least $12 million (March 1949 figures). It would appear that the localities and industries are doing their part.

These activities will greatly reduce the pollution in the James River and in times of normal or above normal flow the results will be satisfactory.

However, the industries (pulp and paper manufacture) use enormous quantities of water. While it is possible to treat their more concentrated wastes, the millions of gallons of water used in processing and washing the pulp cannot be treated economically. These industries will be compelled to discharge large quantities of these dilute wastes into the river. Moreover, primary treatment of municipal sewage, while satisfactory in times of flush water, would not be satisfactory in critical low-water periods. It would require expensive secondary treatment to produce satisfactory results.

The evaluation of pollution abatement put on this project by the United States Public Health Service is based on cost of alternative secondary treatment plants

which would accomplish the same result for domestic sewage. Primary treatment of domestic waste and the equivalent thereof for industrial pollution would be done by the municipalities and industries themselves and no calculations are made, in this project which would relieve an of them of this responsibility.

Pollution abatement by the project.— The increased stream flow noted in a foregoing section would eliminate the annual condition of extreme low water during the summer months. The release of 410 cubic feet per second would increase extreme low flow at Covington by about 6 times and for the remainder of the Jackson River by about 4 times. It would approximately double the flow of the James River as far as Lynchburg. The additional supply of 225 million gallons of water daily would greatly help Richmond in her efforts to purify the James river water for municipal and domestic use. Abatement of pollution by the increased flow would be proportionate to the volume of dilution.

The United States Public Health Service has placed an annual value on this feature of pollution abatement of $400,000.

Local damage.—The lake of the Gathright Dam will cover approximately 4,500 acres, of which 1,270 is cleared. Total acreage to be acquired is 12,000 acres, much of which is wooded mountain land. The lake basin is sparsely populated, being owned by one man and used largely as a game preserve. There are no railroads, power lines, or important highways that would be disturbed.

The Falling Spring reregulating dam would cover about 300 acres of excellent farm land. No cemeteries, schools, or business properties would be affected. A branch line of the Chesapeake and Ohio Railway from Covington to Hot Springs would have to be elevated and in part relocated. The total distance of affected track would be 2.75 miles. One primary highway would require relocation for a short distance.

From the above facts, it is evident that social and economic dislocations are at a minimum for projects of this kind.

Recreational aspects.—The lake is situated in the high cool vacation country of Virginia. It will be a deep lake, filling the basin up to the steep slopes of the mountain. With the clear blue of the water and the background of rugged mountains, it will be a thing of great scenic beauty. The mountains around are filled with game and other wild like, including a great variety of birds. The area is filled with a great variety of trees, shrubs, and wild flowers. Forest roads and mountain trails are already developed over much of the area. These together make this area a nature-lover's paradise.

The lake will offer very attractive opportunities for boating, swimming, and fishing. The shores will afford many ideal camp sites.

The James River below the dam was once one of America's most famous fishing streams. Flood control and the increase in stream flow will not restore this condition but will go a long way toward improving the fishing, boating, and other recreational features of the stream. We feel that the values set on the recreational aspects of this project of $12,000 are mere token values and should be increased many times. The lake and the improved river will be among the best recreational areas in the State.

Electric power.—Electric power installation at the dam would consist of two generating units with an installed capacity of 34,000 kilowatts. Dependable capacity would be 22,000 kilowatts. In addition, dependable capacity of downstream power plants would be increased by 4,400 kilowatts. The value of power produced at the site and the increase of downstream plants is estimated at $878,000.

Economic aspects.—The cost of the entire project, including interest during construction at 4½ percent is estimated at $20,200,000. Total annual charges including interest, amortization, maintenance and operation is estimated at $985,000.

Average annual benefits are estimated at $1,440,000. The economic ratio is 1–1.50. It has been characterized by Col. R. E. Cruse, district engineer of the Norfolk District at the time the survey report was released, as the best project on any of the Virginia rivers and one of the best projects in the East.

Endorsement.—This project had the approval of Governor William M. Tuck who was the State's chief executive at the time and of the State planning board. It also has the support of the City Councils of Covington, Lynchburg and Richmond and board of supervisors, town councils, chambers of commerce, newspapers, civic business and farmers groups, veterans and labor organizations and REA cooperatives in the western half of the James River Basin.

Petition.—The proponents of this project are aware of the need for reduced expenditures and economy in Government and approve the efforts of the Congress

to effect these purposes. For this reason, we are not asking for the considerable sums that would be necessary for construction. We are confining our requests to the very moderate amount that is necessary to continue the planning work in an orderly and proper manner.

We could in asking for "immediate priority" set up a strong claim to "defense significance." Two large foundries greatly affected by this project, employing 1,200 men were engaged almost entirely in war work during World War II. And 3 other plants employing more than 3,000 men had very high priority because of the wartime importance of their product. We could also claim "critical flood and water shortage area" as the foregoing brief amply demonstrates. This we are not doing.

We do, however, consider it wise from many standpoints that the planning of these authorized projects be continued so that they may go forward progressively.

We, therefore, respectfully petition that the request for $50,000 included in the President's budget for continued planning on this project be approved.

Respectfully submitted for the proponents of the Gathright Dam.

FRED W. MCWANE,
Head of the Virginia Delegation.

Senator KNOWLAND. Julia Duke, of St. Louis.

(No response.)

FLOOD CONTROL, ADAMS AND NORTH ADAMS, MASS.

STATEMENT OF HON. JOHN W. HESELTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

FLOOD CONTROL MEASURES URGED

Senator KNOWLAND. Next we will hear Congressman John W. Heselton, of the First Congressional District of Massachusetts.

We are glad to have you with us today, Congressman.

Representative HESELTON. Mr. Chairman and gentlemen, I am appearing in behalf of two flood-control projects on the Hoosic River, at Adams and North Adams, Mass., which are in the district I represent in Massachusetts.

PREVIOUS FLOODS

These 2 projects were begun in 1950 after the 2 communities had suffered from a series of disastrous floods, particularly those of 1927, 1936, 1938, and 1940. It has been estimated that the total damage sustained during these 4 floods exceeded $15,760,000, all of which would have been prevented had the flood-protection measures been in operation.

The average annual benefits at Adams are placed at $318,500, and the benefit-to-cost ratio is 1.43 to 1.

The average annual benefits at North Adams are placed at $829,000 and the benefit-to-cost ratio is 1.31 to 1.

At Adams the first two units have been completed. The total appropriations to date have been $844,000.

BUDGET RECOMMENDATION

In both the budget submitted by ex-President Truman and the present administration's budget an appropriation of $390,000 is recommended.

This would bring the project to about 25 percent of completion.

Upon the completion of the entire project, protection will be given for 4 of the town's major industries, to approximately 125 commercial

establishments, to about 500 residences, and to a number of public buildings, bridges, and utilities.

I understand the protected area comprises 65 percent of the industrial and commercial section and about 15 percent of the residential section of the town.

APPROPRIATIONS TO DATE

In North Adams, the first two units there have been completed. The total appropriations to date are $1,183,000.

Again, both in the budget submitted by ex-President Truman and in the present administration's budget, an appropriation of $875,000 has been recommended. This would bring about a 14-percent completion of that project.

One important result of the completion of this third unit would be flood protection to the Sprague electric plant and the Northern Berkshire Gas Co., which supplies not only the Sprague Co., but the communities of North Adams and Williamstown with their electricity and gas.

The Corps of Engineers will be able to advise the committee as to the nature of the security and classified manufacturing being done by this company in connection with the defense effort.

All I can say to you publicly is that it is the largest employer in the city and one of the Nations' most important producers in this particular field.

SCOPE OF PROTECTION

Upon completion of the entire project, protection will be given to 15 industries, including, of course, the Sprague Co. and the Northern Berkshire Gas Co., also to 570 commercial establishments, 580 residences, and many public buildings, roads, and utilities.

I understand this will cover about 85 percent of the commercial and industrial section of the city and about 25 percent of the residential section.

I think you should know that in regard to these projects the Commonwealth of Massachusetts recognized the importance and has appropriated $2 million, which is to be used in connection with the incidental work on bridges, roads and utilities, and for land damage.

Also, Berkshire County and the two communities have gone to very considerable local expense in the past in providing temporary measures of relief, and, of course, they contribute to the fullest extent in this connection.

TOTAL FEDERAL INVESTMENT

May I call your attention, then, to the fact that there is now a total Federal investment in these 2 projects of $2,700,000.

You gentlemen know better than I do that it is not only a source of additional expense when work is stopped and started up again, but there is also a continuing risk to the construction in the event of another flood.

I should add that a few weeks ago they had high water there, and undoubtedly what has already been done was a matter of considerable importance to them.

Senator ELLENDER. What are the prospects of the House providing money for that?

Representative HESELTON. I was going to make a statement that I cannot give any assurance as to action by the House committee. I am extremely grateful to this committee.

Senator ELLENDER. Most of the money appropriated for these projects has been put in by the Senate.

Representative HESELTON. In every instance. My only hope is that in this case when we have two separate budget recommendations, identically the same amount, that will have an influence on the House committee.

Senator MCCLELLAN. Have you appeared before the House committee?

Representative HESELTON. We appeared yesterday before the House committee.

Senator KNOWLAND. I might say, for the benefit of those here, that this year we endeavored to help the local witnesses by having our meetings coming along a day subsequent to the House hearings, so that the witnesses would not have to make a long trip down the second time.

Representative HESELTON. We appreciate that very much indeed.

Senator KNOWLAND. We have a communication from Senator Saltonstall, as follows:

> Mr. Chairman, you have heard Congressman Hezelton and representatives of Adams and North Adams, testify as to the need for the completion of the flood control at these locations. We have been here before. You have recognized the need. I know the problem intimately which they face from flash floods situated as they are at the foot of the very steep slopes of our Berkshire Hills.
>
> The amounts necessary for carrying on this flood control are in the revised budget. I hope you may approve them.

Senator Saltonstall also furnished the committee two telegrams he received relative to the Adams and North Adams projects. These telegrams will be placed in the record at this point.

(The statement referred to follows:)

BOSTON, MASS., *May 14, 1953.*

Hon. LEVERETT SALTONSTALL,
Senate Office Building, Washington, D. C.

I wish to be recorded in favor of flood control for Adams and North Adams.

Representative ROGER A. SALA,
First Berkshire District.

BOSTON, MASS., *May 14, 1953.*

Senator LEVERETT SALTONSTALL,
Senate Office Building., Washington, D. C.

Record me in favor of the appropriations for flood control for North Adams and Adams, Mass.

Representative RICHARD A. REUTHER,
Statehouse, Boston 33, Mass.

Representative HESELTON. And I believe Senator Kennedy plans to appear before this committee at some time in the very near future.

Senator KNOWLAND. He was scheduled to be here today and was not able to appear. However, we understand he is to appear later. Of course, I might say also that Senator Saltonstall is a very valued member of the full committee.

Representative HESELTON. May I introduce Mr. Ernest H. Rosasco, mayor of North Adams.

Senator KNOWLAND. We will be glad to hear you, sir.

CITY OF NORTH ADAMS, MASS.

STATEMENT OF ERNEST H. ROSASCO, MAYOR

PREPARED STATEMENT

Mr. ROSASCO. Mr. Chairman and gentlemen of the committee, I am here representing the city of North Adams and hope to tell you a little bit about our local interests and the vital necessity of this work.

I would like to ask that the statement that I have prepared be incorporated into the record.

Senator KNOWLAND. The statement will be printed in full at this point.

(The statement referred to follows:)

STATEMENT OF ERNEST H. ROSASCO MAYOR OF THE CITY OF NORTH ADAMS, MASS.

The city of North Adams appears before this committee today to support the recommendation contained in the President's budget for the continuation of the flood-control work on the Hoosic River Basin flood-control project.

While we are mindful of the necessity for drastic economy with which you gentlemen are faced, we submit that the continuation of this project is vital to the business and industrial life of our city. We come to you not as a grasping people supporting a project of convenience but rather as a desperate people supporting a planned project which will protect us from a devastating force that we have not been able to control.

North Adams suffered four disastrous floods in the years 1927, 1936, 1938, and 1948, with losses estimated at $6 million. After these disasters, Congress appropriated money in 1950 to start the Hoosic River Basin flood-control project. Before the work was started, another damaging flood struck the city in November of 1950. These periodic floods brought home the necessity for a continued flood-control project that would provide the 22,000 citizens of our city with adequate protection from a frequently rampant Hoosic River.

An examination of the map, presented as exhibit A, will illustrate the effects of a typical flood on our city. This map was prepared after the 1948 flood and shows the areas adjacent to the river channels, which are inundated each time the river overflows its banks. These areas are indicated in light blue. You will notice that all of our industries and most of our business areas are affected by these floods.

The first appropriation of $350,000 provided for a channel excavation, a drop structure and stilling basin, a concrete wall, and necessary paving west of Brown Street. This usable unit was completed in 1951. In the same year, Congress appropriated an additional $400,000 for a second usable unit of work in the form of a concrete chute or flume and new bridge abutments. The United States Army Corps of Engineers had hoped that this money would advance the work to a point beyond the confluence of the north and south branches of the river. However, the appropriation was not sufficient to complete the second usable unit, and work has been halted at a point west or downstream from the confluence of the river branches.

The completed work has already served our city well, but it is apparent that North Adams will not receive adequate flood protection unless the project is continued along the north and south branches of the river. Industrial and business areas in our city are crowded into the bottom of a small cuplike valley. The north branch of the Hoosic River comes downmountain with an irresistible and presently uncontained force which destroys all before it. The south branch meanders down the valley after it leaves Adams, and in floodtimes inundates a substantial part of our residential area and nearly all of our business area.

Two of our main industries are located at the confluence of these two branches in the center of our city; namely, the Northern Berkshire Gas Co. and the Sprague Electric Co. (See exhibits A and B.) The gas company supplies North Adams with its electric and gas. The Sprague Electric Co. is our largest employer and the world's largest manufacturer of capacitors. Both of these industries are essential elements to the present defense effort and also the economic fiber of our city. Neither of the above industries is protected by the work described above.

We have been informed by the United States Army Corps of Engineers that the budget recommendation, presently before this committee, will provide for the completion of the second usable unit and a necessary third usable unit. This appropriation, if approved, would provide for the extension of the concrete chute or flume from the present closure near the confluence along the north branch for a distance of 900 feet to Marshall Street and along the south branch more than 300 feet to a point known as Johnson's Dam. (See exhibit B.) The completion of this recommended work would give almost complete protection to both of the industries previously mentioned, and also give substantial protection to the business district, many smaller industries, and residential areas adjacent to this area.

The Commonwealth of Massachusetts and the city of North Adams will continue to assume the local costs of this project, including replacement of existing bridges, alteration and reconstruction of city streets and utility lines, furnishing necessary rights, easements, and interests in adjacent lands, and any other items in this category. We cannot, however, bear the financial burden of coping with this rampant river which runs through three States and several cities and towns in northwestern Massachusetts.

Through the years, many temporary or stopgap measures have been applied by the Corps of Engineers, the State, and the city to provide protection against the floodwaters. In fact, it is estimated that more than $2 million have been expended for these measures in the last 25 years. The last example of this occurred in 1950 when the United States Army Corps of Engineers stepped in and hired a contractor to drive 600 feet of steel sheeting as a temporary protective measure for the main station of the Northern Berkshire Gas Co. The cost of this work, about $40,000, was deducted from the first appropriation, and this is one of the reasons why the second usable unit of this project was not completed. It seems reasonable that a continuous flood-control project would eventually provide this city with the needed protection and also eliminate the expensive temporary measures.

North Adams will continue to face physical and economic damage unless the project is carried to completion, and the costly and excellent beginning already made may be endangered.

I therefore urge the committee to approve the President's budget recommendation for the continuation of the Hoosic River flood-basin project.

PROJECT DESCRIPTION

Mr. ROSASCO. Just to present this to you pictorially, gentlemen, and probably to make it a little clearer, this is a map I have here of the city of North Adams [indicating]. It shows the Hoosic River.

North Adams is crowded into a small valley, and 85 percent and virtually all of the industrial and business community is in this small circle of 2 miles in diameter.

The Hoosic River starts up in Vermont, and this is the branch that does the damage. It comes down the mountain with a terrific, irresistible force, and these red dots are our industrial plants.

The southern branch of the river comes up from Adams, and a representative of that community will speak to you.

The blue-shaded areas show the terrific inundation of the city area by this river in flood periods. We have had 5 severe floods in the past 25 years.

At the confluence of these two branches of the Hoosic River, this large red block represents the main plant of the Sprague Electric Co., of which Congressmen Hazelton has spoken to you, and the Northern Berkshire Gas Co. which supplies the power and light for both communities is also situated at the confluence of the two rivers.

Sprague Electric also has a branch of its plant just below the confluence.

Already a spilling basin or drop basin has been installed just west of the confluence of the rivers, and this work in the second phase has

been brought up just short of the confluence, as is shown in these pictures that we have presented to you.

The northern branch runs up right along side the Sprague Electric Co., which is all of this, and runs up some 1,200 feet easterly of the confluence.

It is hoped that we may continue this work up this northern branch. That whole north wall of that factory, which is vital to us and our major industry, has been torn out time after time in flood periods.

It is also hoped that the work will continue some 300 or 400 feet up the southerly branch.

We are willing to do all that we can. We are not seeking something for convenience, but something that is necessary and vital to our lifeline.

LOCAL APPROPRIATIONS

We ourselves have appropriated money, and as Congressman Heselton has stated, there is some $2 million that we have appropriated to go along with the United States Government.

I can say readily while our costs have not as yet been finally determined, that in the second phase, our investment will probably exceed the Federal investment.

We are trying to do all we can, but this thing is too big for us to handle a river that goes into three States and a number of communities, and it is really vital to us.

I thank you very much.

Senator KNOWLAND. Thank you.

Representative HESELTON. Now I want to present Mr. Andrew Dilk, who is counsel of the town of Adams.

TOWN OF ADAMS, MASS.

STATEMENT OF ANDREW DILK, COUNSEL

GENERAL STATEMENT

Mr. DILK. Mr. Chairman and gentlemen, it is getting late in the afternoon and I won't knowingly trespass upon your time or repeat some of the remarks made here a moment ago. In fact, this year, I haven't submitted a written statement, but I have submitted these pictorial views to show you what we are up against.

We are at the base of the largest mountain in the State of Massachusetts, Mount Greylock, being 3,500 feet. That is one mountain range. Then we have another mountain range on the opposite side.

We are solely an industrial community.

In one of those pictures you will see the brick buildings of our largest industry, a cotton mill, which has been in existence some 75 years and employs 2,000 people.

The peculiar thing about many of our industrial towns in Massachusetts and New England is the fact that we were all built close to and practically on the river. The town is dissected by a series of 5 or 6 bridges. The State of Massachusetts has provided a half million dollars for land damages in replacing these bridges that you see here.

We are absolutely dependent economically upon the existence of these industries, and I can assure you one of those pictures, one of the smaller ones, will show you where the post office is inundated. People

along the river have spent hundreds of thousands of dollars in privately building those bridges.

Some of those views will show you how those thick walls of 1 foot have just crumbled simply because there wasn't any coordination.

PRESENT PROBLEM

And let me finally say to you that you have made an investment there. You have made it on three occasions. In fact, when the first job was going on, I think it is a matter of record that the contractor almost went broke as a result of all of his installations being knocked out while he was actually in the process of building this first segment where the two rivers come together.

Our problem is this, we are not the Connecticut, we are not the Mississippi, we are not the Missouri, but we are a hundred times worse because it all comes down just like a snap of the fingers.

And on four occasions, the last one being only a few weeks ago, we were threatened with the kind of an inundation that you can't imagine. Even the larger rivers don't spell the sort of thing that this one does.

As I sometimes read of the great rivers throughout the United States, they can tell you on 24-hour notice what the elevation and rise is going to be. We can have a rainy spell and almost overnight, before you get out of bed, we are practically calling for the American Red Cross and every agency in the Commonwealth of Massachusetts. This is going to be our salvation.

Thank you, sir.

Representative HESELTON. I would like to present to the committee Mr. Clayton L. Couture, chairman of the board of selectmen, Adams, Mass. He will be glad to answer any questions.

Senator KNOWLAND. We are glad to see you, sir.

Representative HESELTON. We want to thank you very much, Mr. Chairman.

Senator KNOWLAND. Thank you, Congressman Heselton.

PAINTED ROCK DAM, GILA RIVER, ARIZ.

WELLTON-MOHAWK IRRIGATION DRAINAGE DISTRICT, ARIZ.

STATEMENT OF R. H. McELHANEY, PRESIDENT, ACCOMPANIED BY MR. ROBERT McCARTY, REPRESENTING MR. EVAN T. HEWES, PRESIDENT, IMPERIAL IRRIGATION DISTRICT, CALIF.

JOINT STATEMENT

Senator KNOWLAND. The next item is "Painted Rock Dam," located on the Gila River, Ariz.

The first witness is Mr. R. H. McElhaney, president of the Wellton-Mohawk Irrigation and Drainage District.

You may proceed, Mr. McElhaney.

Mr. MCELHANEY. We have a joint statement here. This is a joint statement of Wellton-Mohawk Irrigation and Drainage District, the Yuma County Water Users Association, Unit B Irrigation and Drainage District, North Gila Valley Irrigation District, the Yuma Irrigation District, all located inArizona; the city of Yuma, Ariz., and the Imperial Irrigation District, located in California, in support of the

$160,000 appropriation for planning by the Corps of Engineers on Painted Rock Dam, located on the Gila River.

The following statement is joined in by the irrigation districts and political subdivisions of the States of Arizona and California, as follows:

LOCATION OF DISTRICT

The Wellton-Mohawk Irrigation and Drainage District is represented before the committee by R. H. McElhaney, its president. The district is located on the Gila River approximately 40 miles east of the city of Yuma, Ariz. It is a reclamation project currently being constructed at an estimated cost of $42 million and contains 75,000 irrigable acres.

Senator ELLENDER. Is that all it is going to do, to provide water for irrigation?

Mr. MCELHANEY. No. It is entirely flood control. It provides no water for irrigation at all. It is a flood-control project entirely, as you will see as we proceed down the line. The benefits that will be derived from the construction are itemized.

Senator ELLENDER. How much of this cost would be chargeable to irrigation, do you know?

Mr. MCELHANEY. None whatever. It is entirely flood control. No cost is charged to irrigation whatever.

Senator HAYDEN. I think what might have confused the Senator is the statement about the estimated cost of $42 million and that it contains 75,000 irrigable acres.

REIMBURSABLE COST

That is a reimbursable cost, Senator, and highly repayable for the irrigated land down near the mouth of the river. This dam to which he is addressing himself is located about 100 miles above that.

Senator ELLENDER. Will it protect these 75,000 acres?

Senator HAYDEN. That and the Imperial Valley and the city of Yuma and other areas there.

Mr. MCELHANEY. The Painted Rock Dam is entirely nonreimbursable.

Senator ELLENDER. That sentence states, though, that it is a reclamation project currently being constructed at an estimated cost of $42 million and contains 75,000 irrigable acres.

Mr. MCELHANEY. That is right. That is one of the eight units or areas that will be protected by this dam.

The Yuma County Water Users Association is represented before the committee by Mr. John C. Smith, Jr., its president.

That association embraces the Yuma project, which is one of the oldest reclamation projects on the Colorado River and contains approximately 50,000 irrigable acres in the Yuma Valley directly west and south of the city of Yuma.

A part of this same project is located in the State of California, and covers about 15,000 acres in Indian lands and privately owned lands. That area is directly north of the city of Yuma, Ariz.

The Imperial Irrigation District is represented before the committee by Mr. Evan T. Hewes, its president.

Unfortunately, Mr. Hewes was not able to be here, and Mr. Robert McCarty of Northcutt Ely's law firm is here for Mr. Hewes.

TOTAL LAND UNDER CULTIVATION AND IRRIGATION

The Imperial Irrigation District at the present time has under cultivation and irrigation approximately 600,000 acres and is located in Imperial County, Calif.

Unit B. Irrigation and Drainage District, North Gila Valley Irrigation District, and the Yuma Irrigation District are irrigation districts located in Yuma County, Ariz., and also join in this statement. They, together with the city and county of Yuma, have authorized the representatives appearing before the committee to speak in their behalf.

The purpose of this joint presentation of the affected districts and political subdivisions is to urge the appropriation of $160,000 to the Secretary of the Army for use by the Corps of Engineers in planning construction of the Painted Rock Dam on the Gila River in the fiscal year 1954.

This appropriation would allow planning to be completed to the extent that construction contracts could be entered into in fiscal year 1955.

The appearance of these organizations before the committee is unusual and somewhat different from the testimony this committee usually receives from interested organizations and individuals. Ordinarily requests for flood-control purposes are from organizations and individuals who have built or otherwise encroached on hazardous areas and in turn they ask for certain types of flood-control assistance from the United States.

HAZARDS DUE TO UNITED STATES ACTION

In our case that is not true. Our hazards and dangers have been increased by certain actions taken by the United States.

By the adoption of the water treaty of 1944 with Mexico, article 12a of the Mexican treaty required that Mexico construct, within a period of 5 years from the date of the treaty, a diversion structure in the Colorado River below the point where the international land boundary line intersects the Colorado River. The Morales Dam was constructed by Mexico pursuant to the treaty and was completed in 1950, that being within 5 years from the effective date of the treaty with Mexico.

All companion works necessary for flood control in connection therewith were to be built by the United States in this country with a certain cost-sharing rations with Mexico.

Studies by the organization charged with carrying out the treaty, that is, the International Boundary and Water Commission, were undertaken in collaboration with the Corps of Engineers, the Bureau of Reclamation, and the Geological Survey. Those studies showed that without flood control on the lower Gila River a peak discharge of 310,000 cubic feet per second could be expected to occur in the lower Colorado River at Yuma, Ariz.

On May 6, 1950, the International Boundary and Water Commission representing Mexico and the United States, reached an agreement whereby levees would be constructed along the lower Colorado River to contain a peak flow of 310,000 second-feet.

The cost of such work was to be shared between the United States and Mexico pursuant to pertinent provisions of the treaty. Shortly

afterward the Congress of the United States, by the act of May 17, 1950, authorized the construction of Painted Rock Dam on the lower Gila River in Arizona as a flood-control measure.

ANTICIPATED BENEFITS OF DAM

This dam would reduce the maximum probable flood discharge at Yuma, Ariz., in the lower Colorado River, to 140,000 cubic feet per second, and would also provide a greater degree of protection than levees alone.

For this reason the United States and Mexico have constructed the lower Colorado River levee system and its design was based upon the construction of Painted Rock Dam as authorized by Congress and the resulting reduction in the peak flow at Yuma, Ariz., to 140,000 second-feet.

We are now placed in the position where Morales Dam was completed according to the treaty and placed into operation in 1950, but the companion Painted Rock Dam which is needed to adequately protect our area, cannot now be completed and placed into operation before 1960.

Since the authorization of the construction of Painted Rock Dam by the Congress of the United States, the Wellton-Mohawk division of the Gila project has been constructed along the lower reaches of the Gila River. Its main canal system, as well as the lateral distribution system, has also been designed upon the basis that Painted Rock Dam would be constructed as authorized by Congress on May 17, 1950. This project by midsummer of this year will have almost one-half of its acreage under irrigation, and it is developing at a more rapid pace than was thought possible at the time the original studies were made on Painted Rock Dam.

LOCAL INVESTMENT

This one development alone represents an investment of some $42 million by the irrigation district, not to mention the many additional millions which have been and will be invested by the farmers in developing their lands and building their homes in the community.

As has been brought out in this hearing and earlier hearings, the disastrous 1916 flood on the lower Colorado River was occasioned very largely by discharges from Gila River into the Colorado at their point of confluence just above Yuma, Ariz.

POSSIBLE FLOOD DAMAGE

If a major flood occurred prior to the construction of Painted Rock Dam, the following results could very easily happen:

The new Wellton-Mohawk division of the Gila project would have a major portion of its carriage and distribution system completely washed out and ruined.

The flood would then proceed downstream and inundate the areas encompassed within the North Gila Irrigation District and the Yuma Irrigation District, both of which are located at the point of confluence of the Gila and Colorado Rivers.

Because of the difference in gradient of the two rivers, great amounts of debris and other solid material would be deposited at that point.

The result of such deposits would be to breach the present inadequate levee system and spread the river into the cultivated Indian lands as well as the privately owned lands in that portion of the Yuma project located in California.

It would also breach the main canal system of the Yuma project and the unit B irrigation and drainage district. These two associations serve approximately 53-000 acres with irrigation water.

The levee system protecting portions of the city of Yuma and the Yuma Valley would also be breached and thereby flood extensive urban and rural improvements.

If such a flood should reach into the volcanic lake area of the lower Colorado River delta, it would damage the all-American Canal siphon across the new river in Imperial Valley, Calif. as well as the All-American and West Side Canal of the Imperial Irrigation District.

The breaching of the All-American Canal or the West Side Main Canal would result in the interruption in the supply of irrigation water to a minimum of 90,000 acres in the Imperial Irrigation District. This interruption of supply could result in the loss of the entire crop of that acreage.

To briefly recapitulate: a major flood, by destroying the main canal systems of the projects listed above, could cut off the irrigation current average crop values of $300 per acre, the loss from this one phase alone would be approximately $66 million. This does not take into consideration the other physical damages which would come as a result of such a flood to farmlands, buildings, canal systems, and urban improvements in and adjacent to the city of Yuma, Ariz.

ESSENTIALITY OF CONSTRUCTION

Therefore, it is readily apparent that the construction of Painted Rock Dam is essential if these large flood damage losses are to be prevented.

As stated earlier, the United States has contributed to the increase of this hazard and danger. In fairness to the people and organizations that have made millions upon millions of dollars of investments in these areas, the United States should proceed at the greatest possible speed with the completion of planning and begin construction upon Painted Rock Dam.

With a minimum of 4 to 5 years for construction of the dam, it would be 1959 or 1960 before it could be placed into operation. This would be 10 years from the date when the need of this work was greatly increased by action taken by United States.

AMOUNT REQUESTED

We therefore respectfully request that $160,000 be appropriated for the purpose of planning work upon Painted Rock Dam.

Senator HAYDEN. Mr. Chairman, I might state a flood of this magnitude on the Gila River is comparatively rare. The earliest record I have been able to find of a flood of this magnitude was in the winter of 1861–62 when there was a garrison of Union soldiers at Fort Yuma who were to be replaced by California volunteers, the regulars had come on east.

A great flood came down the Gila, where Fort Yuma is located right across from the city of Yuma, and the California volunteers coming

in there had to wade up to their armpits across the area that is now under irrigation.

The 1916 flood, which is referred to here, was not down the Colorado River at all. It all came out of the Gila River.

The ordinary flow of the Colorado River was the gradual rise beginning in June. It scoured out the channel of the river so that the riverbed at Yuma at the peak of the flood would be 20 feet or more below the level of the sand and gravel in the river bottom there at low-water time.

Well, this came down in the wintertime. The Colorado would have the June rise and then scour out in the summertime. This flood came down in the wintertime and breached the levees leading into the Imperial Valley and let the whole flow of the Colorado River in there for about 2 years and did terrific damage.

It was ultimately repaired by the Southern Pacific Railroad Co. The lines had been washed out. That company was later reimbursed.

It is true that we have constructed some reservoirs to detain the waters in the headwaters of the Gila, but the quantity of rain that has been recorded that has fallen would fill every reservoir we have—that fact was recognized when the treaty between the United States and Mexico was negotiated.

TREATY SPECIFICATION

In the treaty it was specified that this dam at Painted Rock would be built. So it is a treaty obligation on the part of the United States to protect lands in the United States, also land in Mexico which is irrigated from the Morales Dam, because again the water could flood them both on the east and west banks of the Colorado River if there were a flood of this kind.

There is just no channel that will accommodate a flood of this kind, and there are no levees adequate to hold it if the water came down. That is the exact status.

So I think we are fully justified, under those treaty provisions, and under the facts as shown by the witness, in making this appropriation of $160,000.

Senator GOLDWATER. Mr. Chairman, may I say a few words?

Senator KNOWLAND. Yes, indeed, Senator Goldwater.

STATEMENT OF HON. BARRY M. GOLDWATER, A UNITED STATES SENATOR FROM THE STATE OF ARIZONA

SUPPORT OF REQUEST

Senator GOLDWATER. I have been identified with Mr. McElahaney on this project for a good many years, through our mutual association on the State stream commission.

I can assure you what Mr. McElhaney asks for is badly needed, and what Senator Hayden described to you has happened within the memory of man.

In fact, it was only in 1951 that they developed a new source of flood into the Gila.

The old Agua Fria Basin, that you have been working on, Senator Hayden, has been so denuded by overgrazing and by development of

the land to the north that it now presents an almost annual threat to the Gila. And if you add that to the normal flow that we can expect in high floods this situation can come.

ORIGIN OF SALTON SEA IN CALIFORNIA

What Senator Hayden did not bring out in his telling you about the floods of 1905 and 1906 is the fact that that is why you have the Salton Sea in California.

Nevertheless, that can happen, and I join with my senior Senator in urging favorable consideration of this request from Mr. McElhaney.

Senator KNOWLAND. I might say that while the chairman, under normal circumstances, does not commit himself on projects, with the very able exposition made by the senior and junior Senators from Arizona, they can rest assured of the close cooperation and friendship between our two States and that this project will have the full support of the Senator from California.

Senator GOLDWATER. Thank you, Senator.

Mr. MCELHANEY. Senator, I would like to introduce Mr. John C. Smith, president of the Yuma County Water Users Association. He might have a few words to state.

Senator KNOWLAND. We will be glad to hear Mr. Smith.

YUMA COUNTY WATER USERS ASSOCIATION, ARIZONA

STATEMENT OF JOHN C. SMITH, JR., PRESIDENT

FUNCTION OF ASSOCIATION

Mr. SMITH. Mr. Chairman and gentlemen, I am John C. Smith, Jr., president of the Yuma County Water Users Association.

This organization has the job of placing irrigation water to Yuma Valley farmers for approximately 50,000 acres of very productive land in the Yuma Valley.

The Yuma Valley project is in relation to the old Yuma project which was authorized and built from 1902 to 1905. The project gets its water from the Imperial Valley Dam which is brought down by canals to the Yuma Valley on the California side of the Colorado River.

The Yuna Valley is below the junction of the Gila and the Colorado Rivers, so it is the flood plain of the Colorado River and the Gila River.

Back in 1902 and 1905 and 1916, the Government felt that to keep the Colorado River out and the Gila River out they would have to put a protective levee around the valley. We have that protective levee now.

So you can see that any flood-control measures on the Gila River or Colorado River are of great interest on the part of the farmers in this area, and because of the potential damage set forth in the joint statement that Mr. McElhaney has just presented to you, we certainly appreciate any consideration to solve this problem.

At this time I would like to thank you, Mr. Chairman and gentlemen, for your consideration and the time that has been given to us on this project.

VALUE OF YUMA VALLEY CROPS

Senator HAYDEN. Could you give me some idea of the value of the crops produced in the Yuma Valley, sir?

Mr. SMITH. We have 50,000 acres down there, which we farm 365 days of the year, and the crop value is approximately $300 per acre.

Senator HAYDEN. Thank you.

Senator THYE. Might I ask a question here, Mr. Chairman?

Senator KNOWLAND. Certainly, Senator Thye.

Senator THYE. What do you produce there? Is it citrus, or cotton, or what?

Mr. SMITH. Cantaloups, vegetables, cotton, alfalfa, cattle feedings. There is no citrus down in the Yuma Valley, in the Yuma Basin.

Senator KNOWLAND. Thank you very much, sir.

We will hear you now, Congressman Patten.

PAINTED ROCK DAM

STATEMENT OF HON. HAROLD A. PATTEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

TREATY OBLIGATION

Representative PATTEN. Mr. Chairman, I think it is worthy of note that John C. Smith is also Speaker of the House of Representatives of the State of Arizona.

Mr. Chairman, I just want to concur with what has been said here and to say that I appreciate your allowing these gentlemen to come this long way to appear before you today.

We know of our need and the obligation we have under the treaty. We have the moral obligation because we told Mexico to lower their dams because the 310 second-feet of water would not arrive, only 140 second-feet of water would arrive.

Therefore, because we were going to build the Painted Rock Dam, it is unfortunate that it will be 1959 or 1960 before it gets done. So we can just cross our fingers hoping we do not have a flood between now and then.

Thank you very much.

Senator KNOWLAND. Thank you very much, Congressman.

FLOOD CONTROL, CAPE GIRARDEAU, MO.

STATEMENT OF HON. PAUL C. JONES, A REPRESENTATIVE TO CONGRESS FROM THE STATE OF MISSOURI

BUDGET RECOMMENDATION

Senator KNOWLAND. Next we have the item of flood control for the city of Cape Girardeau, Mo. We will hear Congressman Jones, of Missouri, on that.

Congressman, we are glad to have you here with us.

Representative JONES. I would like just a half minute, Mr. Chairman.

I come from the Tenth District of Missouri. Cape Girardeau is the largest town in my district and also the largest town on the west bank of the Mississippi River between St. Louis and New Orleans.

On two occasions the Bureau of the Budget has recommended funds for this project, in one instance $1 million, and this last time, $989,000, for a flood-control project which has been based and made necessary because of other flood-control works that have been done along the river.

I am not going into the details of this project because Mr. R. B. Oliver, Jr., of Cape Girardeau, representing the two levee districts at Cape Girardeau is here and has a prepared statement.

But I would like permission, Mr. Chairman, to file a letter from the Chamber of Commerce in Cape Girardeau because it sets out the facts and also the need.

Senator KNOWLAND. The letter will appear in the record in full at this point.

Representative JONES. Thank you, sir.

(The letter referred to follows:)

CAPE GIRARDEAU CHAMBER OF COMMERCE,
Cape Girardeau, Mo., May 9, 1953.

Re Cape Girardeau, Mo., Flood Control House Document 204, 81st Congress, 1st Session, Public Law 516, 81st Congress, 1st Session.

To the Senate and House Subcommittees of the Appropriation Committee for Civil Functions.

GENTLEMEN: The raised hopes of the city of Cape Girardeau and its citizens for flood protection have again been dashed by the removal from the 1954–55 budget of the $989,000 allocated for flood protection for this city. The Cape Girardeau Chamber of commerce is solidly in favor of flood protection for this city. Cape Girardeau is the largest and most important city on the west bank of the Mississippi River between St. Louis and New Orleans. It is the only city on this west bank without flood protection. Our Cape Girardeau section is the only unprotected part of the river south of St. Louis to the Ohio River. Cape Girardeau has not asked for flood protection until recent years when we have had almost annual disastrous floods. These floods have been caused by the work of the Government in protecting the shores of Illinois above us and across from us and the shores of Missouri above us. This has resulted in turning the natural asset of the Mississippi into an uncertain liability.

Having been founded upon the river, Cape Girardeau has naturally built from the river and practically all of our industries, much of our retail section, and several hundred dwellings are subject to these almost annual floods.

Without flood protection, the health and safety of our city is continually threatened. Our utilities plant has been saved through several of these floods only by superhuman effort, and if the utilities flooded out our power would cease, our water supply would be threatened, and eventually completely depleted. We would find it difficult to combat the hazards of fires as well as having a health hazard. Naturally, all our commerce, industry, and business would come to a standstill if a flood should close our utilities plant. There is no question that the failure to properly safeguard this city from the ravages of the Mississippi floods threatens the health, safety, and jobs of the 25,000 people living in Cape Girardeau as well as the jobs of many who depend upon Cape Girardeau for work.

Cape Girardeau has always regarded the Mississippi River as an asset. We are proud to see increasing commerce upon the river and we are making improvements upon our waterfront to take care of river traffic. When a flood hits us, no water traffic can stop in Cape Girardeau. As a matter of fact, there is no traffic to Cape Girardeau—commerce stops. The Frisco Railroad, which follows the Mississippi from St. Louis to Memphis, Tenn., and the Missouri Pacific Railroad cannot bring their trains into Cape Girardeau. Mail, express, and freight schedules are disrupted. Furthermore, if it had not been for the fact that the Missouri State Highway Department has only recently raised the grade of its highway south of this city; truck and automobile traffic into Cape Girardeau from the

south and west would be impossible when the river is up beyond the 38-foot stage. The Mississippi in flood forces circuitous routes to Cape Girardeau.

While the Cape Girardeau Chamber of Commerce realizes that this first appropriation of $989,000 will not complete flood protection for Cape Girardeau, it does think that a start should be made. The Cape Girardeau Chamber of Commerce believes in all fairness that this city and its citizens should not be forced to bear the punishment of Mississippi floods which would not have occurred without the levee protection already afforded property and citizens along the Mississippi across the river and above us.

We respectfully urge that your committee reinstate this item in the budget and hope that you will continue to appropriate sums in the future to provide our city and citizens with the same protection afforded other areas and cities along the Mississippi. We cannot believe that the United States Government and its Congress will discriminate against Cape Girardeau.

Respectfully,

ARNOLD ROTH,
President, Cape Girardeau Chamber of Commerce.
E. J. BAUERLE,
Chairman, Flood Committee, Cape Girardeau Chamber of Commerce.

MATTER OF EQUITY

Representative JONES. I might also add that I am appearing for this only because it is a matter of equity. The Government created this condition there, and we are merely asking that the Government help us to correct this situation.

Thank you very much.

Now, if you will hear Mr. Oliver, I will appreciate it very much, Mr. Chairman.

Senator KNOWLAND. We will be glad to hear Mr. Oliver.

And, Mr. Oliver, I will say to you, as I have to the other witnesses, that you can rest assured your entire statement will be printed in the record, and if you care to brief it for the committee, we will appreciate your cooperation, considering the limitations of time.

MAIN STREET LEVEE IMPROVEMENT DISTRICT, CAPE GIRARDEAU, MO.

STATEMENT OF R. B. OLIVER, JR., COUNSEL

PREPARED STATEMENT

Mr. OLIVER. We will be very brief, sir.

I shall file for the record a signed copy of the statement.

Senator KNOWLAD. That will appear in full at this point in the record.

(The statement referred to follows:)

MAIN STREET LEVEE IMPROVEMENT DISTRICT, NORTH MAIN STREET LEVEE IMPROVEMENT DISTRICT

CAPE GIRARDEAU, MO., *May 4, 1953.*

Re Cape Girardeau, Mo., flood control, House Document No. 204, 81st Congress, 1st session; Public Law 516, 81st Congress, 1st session.
To the Senate and House Subcommittees of the Appropriation Committee for Civil Functions, Washington, D. C.

GENTLEMEN: We would respectfully call your attention to the following facts with respect to Mississippi River flood conditions at Cape Girardeau, Mo.

(1) The 1953–54 budget, submitted by the previous administration, included an item of $989,000 for beginning the construction of flood-protection works at Cape Girardeau, Mo. The 1952–53 budget contained an item of $1,000,000 for

the same purpose. No appropriation was made at the last session because final construction plans had not been completed. They are now.

(2) Flood protection for Cape Girardeau was authorized by the 81st Congress, 1st session, Public Law 516, based upon House Document No. 204, 81st Congress, 1st session. Final plans for the construction of reaches 1 and 2 have now been completed and were included, so we understand, in the recommendations of the Chief of Engineers for construction in the current fiscal year. We also understand it is the purpose of the Corps of Engineers to first provide protection to reaches 1 and 2 as soon as funds are made available.

(3) Cape Girardeau has been disastrously flooded in 7 years out of the last 10. We have absolutely no flood protection. Our floods have been increasing both in frequency and depth due to upstream levees. The same volume of discharge creates a higher flood stage. Previous to their construction, we were practically immune to disastrous floods.

(4) The flood stage at Cape Girardeau is 32 feet. The record of river gage readings shows that prior to 1943 it equaled or exceeded 38 feet only 3 times since 1844, more than 100 years. Since 1943, the last 10 years, it has exceeded 38 feet 7 times (1 of the years (1948) the gage was 37.8 feet—we call it 38 feet).

(5) Cape Girardeau has been an established town with a continuous city government since 1804. The community was established as a trading post a number of years prior to that date. It is the largest city on the west bank of the Mississippi River between St. Louis, Mo., and New Orleans, La., and has a population of 25,000. Like old established river towns, the main business section was established and now remains adjacent to the riverfront. Steamboats were then the carriers; now the Frisco Railroad is next to the river with its tracks at street level. Practically all of the retail business section between the riverbank and the east line of Spanish Street, 2 full blocks in width, although previously not subject to Mississippi River overflow, is now flooded—some of it 2 to 5 feet over the street, with all building basements filled to the top.

(6) The cause for this increase in flood frequency is primarily due to rainfall and the construction of a continuous line of levees on the Illinois side of the river from above St. Louis to below Cape Girardeau which necessarily raises the height of the flood plane. The confined flood between the bluffs on the Missouri side and the levees on the Illinois side has no escape as in former years before the levees were built.

(7) We especially direct your attention to the practical completion of a continuous levee on the Illinois side of the river. Their agricultural lands needed them but neither their districts nor any other party has the moral right to destroy Cape Girardeau. These levees have caused an increase in the projected flood stage of more than 7 feet at Cape Girardeau. The map I shall file with the committee was prepared by and procured from the United States district engineer's office at St. Louis and shows the location of these levees and the status of their completion together with the total estimated cost of the various projects and the amount made available up to the beginning of the present Congress. This map demonstrates why our flood frequency has been so greatly increased in the past 10 years. It is self-evident. You ask why so important a town has not been afforded flood protection? The answer is, we did not need it until the flood plane was raised, but we sorely need it now.

(8) Within reaches 1 and 2 of the flooded area at Cape Girardeau, as designated by the Engineers' plans, are the First National Bank, the chief retail stores, including 8 or 9 so-called chain stores, the Frisco Railroad with its passenger depot, the Missouri Utilities Electric Generating Plant, which supplies electric energy not only to Cape Girardeau but also to the surrounding area to the south and west extending about 75 miles, St. Vincent's Catholic Church, which is the oldest church organization in the city and which is over one hundred years old, a Jewish synagog, wholesale grocery houses, oil distributing plants, International shoe factory with a payroll of approximately 1,500 people, retail automobile agencies, filling stations, hardware stores, and office buildings.

(9) Reaches (3 and 4) are south of the highway traffic bridge over the Mississippi and include the industrial section in the south part of town. Within that area are located woodworkint plants, packing houses, regional oil distribution tanks, the Missouri Pacific Railroad and Marquette Cement Plant. A large part of that area is given up to workmen's homes, some retail stores and markets.

(10) The General Assembly of the State of Missouri, recognizing the public need for flood protection at Cape Girardeau, enacted an enabling act in 1947 (Laws of Missouri 1947, vol. II, p. 226 et seq.) authorizing the creation of special assessment levee districts in municipalities, similar in principle to the procedure

followed in the organization of levee districts in rural areas. The undersigned districts were organized under that law.

(11) Two regularly authorized special improvement districts—political subdivisions of the State—called Main Street Levee Improvement District and North Main Street Levee Improvement District, were organized in 1945 and have executed the required assurances with respect to providing right-of-way, maintenance of work when constructed, and absolving the government from claims for damages because of the construction of the improvements.

(12) The city of Cape Girardeau, by duly enacted ordinances, has made available to the United States of America such portions of its streets, alleys and public places as may be required for construction of the flood protection works.

(13) The Missouri State Highway Department, recognizing the blocking and complete disruption of both local and interstate traffic because of the increased depth and frequency of floods at Cape Girardeau, has already completed the raising of the grade of the highways adjacent to the city of Cape Girardeau in the flooded area south of town at a cost of over $2,025,000.

(14) I would especially call attention to the previous appropriations totaling $43,025,200 (estimated cost $79,772,300) made for building the levees in Illinois and the Perry County levees in Missouri. The river bluffs on the Missouri side begin at the water's edge and rise almost perpendicularly, except for a small area in Ste. Genevieve and Perry Counties, which now have levee protection and are budgeted for more at this time, all of which adds to Cape Girardeau's flood depth. The entire valley in both Illinois and Missouri from St. Louis south has flood protection except the city of Cape Girardeau. This is not as it should be.

(15) Lest some confusion may arise, we would call attention to the item shown on the tabulation on the map (which I will file) of $140,000 made available for the Cape Girardeau project. The cost of final engineering plans was paid out of this fund. No part of this has been or can be used for construction. No contracts have been let.

(16) The Cape Girardeau project was 1 of 5 or 6 other projects especially recommended by the previous administration in the 1953–54 budget for construction during the present fiscal year. That budget allocated $989,000—too small to complete even two reaches but would put encouragement in the hearts and souls of the community.

(17) The Public Works Committee of the Senate saw the 1951 flood both at Cape Girardeau and in the Missouri Valley. Percentagewise Cape Girardeau was damaged as much as Kansas City. Many of the senatorial committee marveled at the flood fight that Cape Girardeau was single-handedly putting up. However, we cannot control the Mississippi River when it is on a rampage. Cape Girardeau has done nothing or failed to do anything which has brought about our flooded condition. Only the Congress and the Corps of Engineers have been able to control it and, if given the requested appropriation, they will save Cape Girardeau from these increasing floods.

(18) The increasing frequency and higher river stages carries the threat as of a ghost silently swishing at flood stage with damage and destruction at Cape Girardeau's most important section. We have gone down and have heard 7 annual counts out of the last 10 years but are still up and on our feet, but we are groggy. Are you going to force us to await 3 more annual counts and then declare Old Man River the winner?

It will not do to say to Cape Girardeau "Be good; keep quiet; we'll take care of you later." The largest and most important city on the west bank of the Mississippi from St. Louis south cannot continue to exist if its transportation, its mail, and its economy are completely disrupted by floods similar to others which have been inflicted upon us in 7 of the last 10 years.

We call your attention to the extent and duration of the flood at Cape Girardeau, as shown by Weather Bureau reports. Remember the flood stage is 32 feet.

Year	Gage reading	Number of days above flood stage
1943	42.40	40
1944	40.80	35
1945	38.70	86
1947	41.90	40
1948	37.80	16
1951	41.80	36

During much of that time the railroads were not operating. "They were shut off an average of 26 days in each of the past 10 years." The mail was greatly delayed, the highways were impassable, the condition of the town was deplorable.

(19) We hope your committee will appropriate such a sum as will provide this city with equal protection to that afforded similarly situated areas with no discrimination between locations. The plans are ready, the assurances have been given, the Budget Bureau has included it in two separate budgets, the Corps of Engineers has prepared the plans, they are ready to let the contracts, and the need is great.

(20) We are not unmindful of the expressed desire and determination of the present administration to reduce appropriations. We are, however, assuming that no cut in budget recommendations—even in the Truman budget—would be made without full study, familiarity, and knowledge of the facts; that funds which have been previously recommended by qualified men will not be eliminated simply because other men, who in the very nature of things and because of the time factor, could not have become as familiar with the facts and the needs as those who made the prior recommendations. There should be no blind adherence to the principle of reducing costs of government to such an extent as would bring about discrimination in preserving the lives and property of our people irrespective of whether they are upstream, downstream, across the river, abroad, or at home.

Respectfully submitted.

MAIN STREET LEVEE IMPROVEMENT DISTRICT,
By C. A. (ANDY) JUDEN, *President.*
NORTH MAIN STREET LEVEE IMPROVEMENT DISTRICT,
By LINDER DEIMUND, *President.*
OLIVER & OLIVER,
By R. B. OLIVER, Jr., *Counsel.*

BUDGET ALLOTMENT

Mr. OLIVER. My friend Paul Jones very briefly epitomized the situation.

The budget which was submitted to this Congress contained an estimate of $989,000 which, it is our understanding, has been eliminated.

The previous budget, for the previous session of Congress, contained an estimate of $1 million for the same purpose.

What was the reason for the inclusion of these two items in those two budgets?

The question is a fair one and naturally comes up.

It is because of the fact that Cape Girardeau has actually no flood protection. It is the largest city on the west bank of the Mississippi south of the city of St. Louis. It is established and has had a continuous city government since 1804.

Like all the old river towns, it was built, as was stated by a previous witness here this afternoon, along the river banks.

For example, St. Vincent's Church, which has been holding masses since 1833, is on the riverbank, and when the river is at flood stage it is surrounded by the river water.

These estimates were included to protect the town which is now flooded by reason of the construction of a continuous line of levees upstream. For over 150 miles north of Cape Girardeau there is a continuous line of levees which are nearly completed.

The confining of those waters which eventually spread out over the great bottom of Illinois, the confining of them within levees has, of course, raised the flood plain and now floods the city of Cape Girardeau.

In that flooded area there is the chief retail district of the town, the First National Bank, wholesale grocery houses, the utility company, and the business part of town is right in that area.

PREVIOUS FLOOD DAMAGE

These pictures we have here [indicating] show the flood which covered the town in 1947 and will give you some idea as to the extent of the flood which occurred down there at that time.

Now, the flood stage at Cape Girardeau is 32 feet. Within the past 10 years we have had 7 floods which have exceeded 38 feet, 6 feet above the flood stage. And then when you go back 100 years back to 1844, which those of you who live along the river will recall was the big flood, only 3 floods of 38 feet and over have occurred within that period of time.

So that, for those reasons, the Budget Bureau felt that an allotment should be made for the building of this levee.

RIVER FRONTAGE

There is a riverfront there of approximately 4 or 5 miles, of the town. It is divided into different reaches, and it is not necessary, by reason of the topography of the town to build all of these at once, because there are promonotories or capes that jut out into the river and make that unnecessary.

These pictures which are here are smaller pictures and show the actual condition that existed in the business area of the town. They were also taken of the 1947 flood, which was not the highest flood.

There are a number of chainstores within that same area, and some of those pictures show Woolworth's.

And those of you who happened to be out there in 1951—I don't recall just who was there—but the Public Works Committee was out there, and those men were greatly surprised at the fight that Cape Girardeau was putting up.

Now, what have the people of Cape Girardeau done? What has the State of Missouri done? The State enacted an enabling act which authorized the organization of levee districts within municipalities. That was done. And then the levee districts were organized within the town, two of them, and I am here speaking for them.

And they have executed all of the requirements which are required by the Government in the construction of these levees, the necessary right-of-way, and the maintenance of the property, and the holding the Government free and harmless from actions.

Senator ELLENDER. How far would your nearest street paralleling the levee be from the levee, Mr. Oliver?

STREET USE FOR CONSTRUCTION AUTHORIZED

Mr. OLIVER. Senator Ellender, the city of Cape Girardeau itself has enacted an ordinance, duly enacted several years ago, authorizing the Government to use the streets, all of them, as much as was necessary for the construction of the levee right on the riverfront.

And the Frisco Railroad is right on the river bank all the way through the town.

Of course, it will be necessary to raise that Frisco Railroad and it will cost the railroad company something over—I think they have estimated about $3 million.

Senator ELLENDER. Will the railroad be on the outside of the levee?

Mr. OLIVER. No, sir. It is an embankment, a terrace, on the levee, as now is provided in the plans.

That is what Cape Girardeau has done; that is what the State has done. The State of Missouri raised the roads, the highways around Cape Girardeau. There are three of them: United States Highway 61, which reaches from Canada to the Gulf and passes through Cape Girardeau; Missouri State Highway 25, and Missouri State Highway 74.

COST OF ROAD IMPROVEMENT

They raised those roads up to the projected flood height at a cost of over $2 million.

The Congress has not done anything toward protecting the city of Cape Girardeau, but, on the other hand, has session after session appropriated money to flood the town. Now, that is a rough statement, but those are facts.

And you might just as well face this thing and stand up and say what the conditions are. That is the kind of way I try a lawsuit, and I am trying to present the facts here to you gentlemen.

Now, then, are you going to stand by and continue to discriminate against Cape Girardeau and continue to make appropriations upstream? They are in the budget which was first submitted. True, they were reduced somewhat, but they are still there.

There has been practically $80 million appropriated to build levees, the effect of which has been to flood Cape Girardeau.

Are you going to discriminate against the town, or are you going to afford it equal protection to towns similarly situated along the river?

QUESTION OF WISDOM OF SLOGAN "NO NEW PROJECTS"

That is the question. Are you going to accept without consideration the slogan "No new projects"? Are you going to throw out and reduce the budget just in order to reduce the figures?

I submit that within the limited time that the present Budget Director has had to go over these projects, in the face of previous studies which have been made long ago and over the years, to just simply adopt the slogan, "We are going to have no new projects," I think, is hardly fair to the people of Cape Girardeau.

I hope that I have not taken more time than I was allotted. We shall have to be content with the result.

Senator KNOWLAND. Thank you, sir.

The next witness is Mr. Robert Brooks.

Mr. Brooks, if you have a prepared statement, you may present it for the record.

Mr. BROOKS. Yes, sir.

CITY OF ST. LOUIS, MO.

STATEMENT OF ROBERT B. BROOKS, CONSULTING ENGINEER

PREPARED STATEMENT

Mr. BROOKS. I have a prepared statement, Senator Knowland, and I will give you about two minutes of factual presentation.

Senator KNOWLAND. Your statement will appear in full in the record at this point.

(The statement referred to follows:)

STATEMENT OF ROBERT B. BROOKS, CONSULTING ENGINEER, ST. LOUIS 1, MO.

Local flood protection for the city of Cape Girardeau, Mo., was authorized by Congress on May 17, 1950, in the Flood Control Act. You appropriated funds for plans. The status of these plans permit advertisement for bids for construction in the fiscal year of 1954, which starts next July 1.

Had you been with me along Main Street in Cape Girardeau, Mo., a few days ago, on Wednesday, May 6, you would have noticed the last high-water mark 6 feet high on the buildings above the sidewalk level and you would have imagined all these buildings inundated with water, together with the merchandise and store fixtures which the storekeepers had not been able to remove. You would have realized that the Frisco Railroad station would have been flooded half-way up to the first floor and that the railroad tracks which make the city of Cape Girardeau accessible by rail between St. Louis, Mo., and Memphis, Tenn., physically cut.

An urgent need exists for the early initiation of construction on this authorized project, since the floods of 1943, 1944, 1947, and 1951 have emphasized the seriousness of the flood problem at Cape Girardeau, a city of some 23,000 persons. located within the area to be protected are the city's main retail shopping district and numerous industries, including a large shoe factory, ice plant, lumber mills, meat-packing plant, surgical-dressing factory, and two gasoline and fuel-storage and distributing plants, as well as wholesale grocery stores and building supply firms. Also located within the area are a large cement plant and a public-utilities power plant, which supplies electricity to the city of Cape Girardeau, as well as a large surrounding area. The passenger and freight depots of the Frisco railway line, as well as churches and other public buildings, are also located adjacent to the river and subject to flooding.

Frequent floods during the period 1942 to 1951 have repeatedly disrupted local business, seriously delayed delivery of mail, and left in their wake a deposit of mud, general unsanitary conditions, and given local interests an understandable concern. Opinion has been expressed that little or no further development or improvement will be undertaken in the area now subject to flooding unless protective measures are provided. Today, some of the larger mercantile establishments are seriously considering leaving Cape Girardeau because of this uncertainty of flood protection for the town. As the authorized levee projects along the middle Mississippi approach completion, it may be expected that floods of a given volume of flow will reach even greater heights than heretofore due to the confinement of the river by levees and elinination of valley storage, thereby further aggravating the local problem. Most of the employment in Cape Girardeau is provided by industries located in the area subject to flooding.

Local interests in Cape Girardeau were instrumental in securing passage of an enabling act by the Missouri State Legislature, which authorized the creation of levee-improvement districts within a municipality. The enactment of an ordinance granting to these special improvement districts the right to use all of the streets, alleys, and public places of the city which are required for putting into effect the authorized plan further indicates the willingness of the city to cooperate to the fullest extent.

Priority for construction is indicated for reach 2, the governing objective being to furnish the maximum possible protection to this industrial and business area as soon as possible. This reach is organized into levee-improvement districts for the purpose of cooperating with the Federal Government in providing flood protection for this area. The levee-improvement districts have furnished the required assurances to the Government that they will supply any and all needed rights-of-way and comply with other requirements of local cooperation.

The downtown section of Cape Girardeau has been flooded and the railroad service disrupted in 7 of the last 10 years. You may well imagine that the Missouri Utilities Co., which supplies electric energy not only to Cape Girardeau but to some 4 dozen towns and cities in the surrounding area up to some 75 miles away, has a serious fuel problem. While it is practical to have a reasonable amount of coal stockpiled for emergency purposes, no one can tell the length of time that the Mississippi River will stay up sufficiently high to prevent the railroad bringing coal to this plant which takes care of Cape Girardeau and numerous surrounding cities, as far as electric energy is concerned.

The president of the chamber of commerce, Mr. Arnold Roth, told me that there is an uneasy feeling among some of the manufacturing plants about their own stockpiling of coal for such an emergency. This does not make for the stabilization of business in the city of Cape Girardeau, which is also considered as a center of culture in southeast Missouri. It is a lovely city, typical of our State of Missouri, where the townspeople keep their town clean and attractive. Imagine the scum and filth left in their buildings after each of these floods.

You are familiar with the fact that a year ago a million dollars was recommended to the Congress for this flood protection at Cape Girardeau. You also know that it was turned down on a technicality.

Republicans and Democrats alike realize that this is a nonpartisan matter of public welfare as well as in the interests of national defense, because these floods 7 times in the last 10 years have disrupted railroad communication for Cape Girardeau. In talking to our Republican national committeeman from Missouri, Mr. A. D. Welsh, a few days ago, he told me that he believed the only reason that would prevent an approval by the Congress of this much-desired appropriation of approximately a million dollars, is the fact that when cuts were applied to what was considered a topheavy expenditure of the last administration, that such a project as Cape Girardeau inadvertently was dropped, even though the amount to be appropriated was small in comparison with some of the matters which really should have been dropped before. An allocation of approximately a million dollars for the next fiscal year will permit a reasonable construction program of the flood-protection project at Cape Girardeau.

If you will have one of your own representatives look at the high-water marks showing the inundation of these business houses and the railroad tracks, all to the detriment of this fine city of Cape Girardeau, which has no flood protection in this area whatsoever, you will be convinced that something should be done by the way of an appropriation for the next fiscal year starting July 1.

GENERAL STATEMENT

Mr. BROOKS. May I also, Mr. Chairman, pay my respects to Senator Hayden, who has repeatedly heard me talk about highways during the time he was chairman of the Highways Committee in the Senate.

As Mr. Oliver told you, Cape Girardeau has been flooded for an average of 11 times each of the last 10 years, and they have been flooded definitely 7 years out of the last 10 years.

Now, what that means is this: Not only has it been flooded, but the city of Cape Girardeau has been cut off from railroad communication from St. Louis to the north to Memphis to the south on the Frisco Railroad.

FLOOD DAMAGE

Had you been with me in Cape Girardeau 10 days ago, as I was, you would have seen the high-water mark on those business buildings and the railroad station of the Frisco Railroad 6 feet above the sidewalk.

Now, what that means to Cape Girardeau is this: There is a public-utility company down there that not only furnishes electricity to Cape Girardeau, a city of some 22,000 people, but also to some 45 or 48 other cities in that whole area. They have to guess how much coal they must stockpile to take care of situations like that.

Those floods for the last 10 years have not only disrupted the railroad service, but they have delayed the mails and they have left dirty, muddy scum over that whole section of the town.

REASON FOR APPROPRIATION REFUSAL

The only reason that the Congress did not pass the million-dollar appropriation, as recommended a year ago by the Director of the Budget, was that the House of Representatives Civil Functions Subcommittee had an idea at that time that the city of Cape Girardeau had not furnished a clear right-of-way on which they could put this levee.

They were mistaken; but, nevertheless, that was their honest opinion at that time.

The city of Cape Girardeau has furnished all of those assurances, and the Director of the Budget Bureau did recommend that a year ago, and also in January.

It is not in the budget as of now, but it really is a sin to let this city and its satellite towns that are supplied electricity from that city linger any longer.

And just imagine what it means to have a city of twenty-one and a half or twenty-two thousand people cut off every year from railroad communication to the south and the north, not get their mails, and jeopardize that whole area so far as the town is concerned.

And the business houses are thinking about whether or not they should continue down there.

The International Shoe Co. has a large factory there. If you would see the high-water line which Mr. Oliver has, you would see that that business is jeopardized also. They have to keep a stockpile ahead.

It is really a serious situation and something should be done about it.

The citizens have complied with all of the regulations as set out by the Government and the Corps of Engineers, and I think that in justice to them something should be done this year, not next year.

Senator KNOWLAND. Thank you very much, sir.

We have one more witness, Admiral Spencer, who will speak on the Great Lakes connecting channels. I understand he has a statement to submit for the record and will speak briefly.

GREAT LAKES CONNECTING CHANNELS

LAKE CARRIERS ASSOCIATION, CLEVELAND, OHIO

STATEMENT OF LYNDON SPENCER, PRESIDENT

PREPARED STATEMENT

Senator KNOWLAND. We will place your prepared statement in the record in its entirety at this point, Mr. Spencer.

Mr. SPENCER. Thank you, Mr. Chairman.

(The statement referred to follows:)

STATEMENT OF LYNDON SPENCER, PRESIDENT, LAKE CARRIERS' ASSOCIATION, CLEVELAND, OHIO

My name is Lyndon Spencer and I am president of the Lake Carriers' Association, with offices in Cleveland, Ohio. The association has 26 member companies who operate 331 dry-bulk cargo vessels on the Great Lakes. The vessels are engaged mainly in the transportation of iron ore, limestone, coal, and grain.

Fifty-two projects for navigational improvements around the Great Lakes have been recommended by the Corps of Engineers and approved by Congress, but await funds for completion. In the same area, the Corps of Engineers has been directed by Congress to make 18 survey reports or preliminary examinations and all these await funds for accomplishment. The proposed budget for civil works for 1954 carries funds for partial completion of just one of the approved projects.

These figures are not quoted as a method of protest or criticism of the contemplated action of Congress in reducing funds for civil works. The Lake Carriers' Association, and all its member companies, are as interested in economy in Government as are the members of this subcommittee. We understand why this Congress desires to go slow in the appropriation of funds until it has had an opportunity to investigate and evaluate the national and world situation.

All of these projects and reports are necessary if the Great Lakes are to continue to provide the lowest cost transportation in the world and meet the demands of the national economy as they have done in the past. They should all be accomplished as soon as possible. One of them, however, is of such importance that we would be remiss in not drawing it to your attention at this time. It is a resolution adopted by the Committee on Public Works of the Senate on March 25, 1953, which requests the Board of Engineers for Rivers and Harbors to review the report entitled "Great Lakes—Connecting Waters, Principal Harbors and River Channels," published as House Document No. 253, 70th Congress, 1st session, and other pertinent reports, with a view to determining the advisability of proceeding at this time with improvements in the Great Lakes connecting channels necessary to provide a channel depth of at least 27 feet, and with a view to preparing up-to-date estimates of the cost of such improvements.

I should like to take just a few minutes to point out the importance of having work start immediately on this review.

The critical points in Great Lakes transportation are in the connections between the lakes; i. e., in the St. Marys River between Lakes Superior and Huron and in the St. Clair River, Lake St. Clair and Detroit River between Lakes Huron and Erie. These connecting waters are all improved channels under the supervision of the Corps of Engineers. As presently maintained, the downbound channels provide approximately 25 feet of water at low water datum.

Low water datum is a reference mark used by the Corps of Engineers. It is different for the several lakes, but in all cases represents an average lake level. Sometimes the water levels are above and sometimes below low water datum.

You gentlemen will understand that when 25 feet of water is available in the channels, the vessels cannot load to a draft of 25 feet. Allowance must be made for squat, wind, waves and other factors. In recommending safe drafts to its member companies, which is done twice a month, the Lake Carriers' Association makes an allowance of 30 inches for the various factors. So, if 25 feet of water is available in the channels, a vessel can load to only 22 feet 6 inches with safety.

Among the 331 vessels presently enrolled in the association are 68 which are permitted by the load line regulations administered by the United States Coast Guard to load to depths greater than 22 feet 6 inches by amounts varying from 4 to 42 inches. That is to say, one-fifth of the present fleet of bulk cargo vessels on the Great Lakes can load with safety to depths greater than that for which the channels were designed.

If the water in the Great Lakes were at low water datum at the present time, the loss in carrying capacity this year would amount to just under 4 million tons. Fortunately, the waters are quite a bit above normal and the loss may be held to less than 1 million tons. But the water is in a falling cycle and the loss will be greater in succeeding years. Due to the addition of many new large vessels during the past 3 years, this potential loss may easily amount to 7½ million tons per year by 1963.

The trend on the Great Lakes is definitely to larger vessels for economic reasons. A ton of iron ore can be carried from Lake Superior to Lake Erie in a 700-foot vessel for approximately 19 cents a ton less than in a vessel under 600 feet. For this one reason, every vessel built on the Great Lakes since 1925 has been more

than 600 feet in length. The saving fails to materialize when the boats cannot be loaded to capacity.

At the time the present channels were authorized the largest vessel had a length of 620 feet, a beam of 64 feet and a depth of 33 feet. Compare that with the largest vessel at the present time, which has a length of 714 feet, a beam of 71 feet 6 inches and a depth of 38 feet 6 inches, and you will readily see why it is necessary that the existing channels be enlarged.

The general importance of the connecting channels can be seen from the volume of traffic using them. Comparison with the traffic at the time the present channels were authorized will also be illuminating.

Traffic (in tons)

	St. Marys River	Detroit River
1950	110,163,373	127,291,663
1926	85,679,087	95,003,604
Increase	24,484,286	32,288,059
Percent increase	28½	34

We believe deepening of the connecting channels can be justified economically but we are sure that deepening is required for the defense of this country. Knowing that 80 and 85 percent of the iron ore used in the manufacturing of steel in the United States is moved over the Great Lakes, it takes no imagination to realize how important it is that the vessels used in this trade be utilized to their full capacity. If we are unfortunate enough to become embroiled in another armed conflict, the steel mills will need every last ton of iron they can get and there is no assurance that any of it can be brought in from foreign countries.

Deepening of the connecting channels cannot be accomplished overnight, no matter how great may be the emergency. Many factors are involved and only an exhaustive study of the whole problem will determine the best and most economical procedure. It is quite probable that from 7 to 10 years will elapse from the time such a study is undertaken until improved channels become available to navigation. Both economic and defense reasons demand that the study be started at once.

Congress has directed the Corps of Engineers to make a study to determine if and how the levels of the Great Lakes can be controlled to prevent the wide fluctuations that presently exist. Preliminary work on this study has already started. Good sense dictates that the study of the connecting channels be carried on concurrently because there is a definite relationship between the outlets of the lakes and the water levels of the lakes.

Of all the 70 projects on the Great Lakes awaiting funds, a study of the connecting channels is the only one for which the Lake Carriers' Association makes a plea for funds during 1954. The others are important but this one is so necessary to national defense that any delay in getting it started would be false economy and might be calamitous.

Representatives of the Corps of Engineers have estimated that the review report on the connecting channels directed by the Senate Committee on Public Works will cost in the neighborhood of $100,000. The members of this subcommittee are urged to make such an amount available in the budget for 1954 in order that the study may get underway this year.

SUMMARY

1. Proposed budget for 1954 carries funds for partial completion of just 1 of 70 projects and surveys for navigational improvements around the Great Lakes authorized by Congress.

2. Attention invited to resolution adopted by Committee on Public Works of the Senate on March 25, 1953, requesting a review report on connecting channels in Great Lakes.

3. Connecting channels are critical points, limiting depth to which vessels may load.

4. Present project permits draft of only 22 feet 6 inches when lake levels are at low water datum.

5. One-fifth of present fleet of bulk cargo vessels on the Great Lakes allowed by load-line regulations to load to greater depth.

6. Potential loss of cargoes runs from 1 million tons during present year to 7½ million tons in 1963.
7. Larger vessels being built all the time.
8. In 1950, 110,163,373 tons of traffic passed through the St. Marys River and 127,291,663 tons passed through the Detroit River. Since the present channels were authorized these tonnages have increased by 28½ and 34 percent, respectively.
9. Deepening of connecting channels necessary for (1) economic reasons, (2) national economy, and (3) defense.
10. Presently 80 to 85 percent of iron ore used in United States is transported over Great Lakes. In case of war, that proportion will increase because of inability to import foreign ores.
11. Deepening of channels will require from 7 to 10 years from time study is initiated.
12. Study should be made concurrently with study to determine method of controlling lake levels already under way.
13. All projects on Great Lakes are important but deepening of connecting channels is only one for which Lake Carriers' Association makes a plea for funds. This one is so necessary to national defense that any delay in getting it started would be false economy and might be calamitous.
14. Committee urged to make $100,000 available in 1954 budget for this survey.

GENERAL STATEMENT

Mr. SPENCER. Gentlemen, I appreciate your courtesy in staying here and listening to me, and for that reason I will just say a few words, and you have my written statement.

I hope, though, that the shortness of my remarks will not decrease the importance of this project in your minds.

Just in March the Senate approved, or asked the Corps of Engineers to make a report on the connecting channels in the Great Lakes. There has been no time to have that considered by the budget, and that is the reason why I am appearing here and asking for some consideration that that be included in the budget for 1954.

It is not the work itself; it is only the study of what is necessary.

CRITICAL GREAT LAKES POINTS

These connecting channels are the critical points in the Great Lakes. They were built for a depth of 25 feet at low-water datum. We now have one-fifth of our present fleet that can load to greater depths than the channels would provide at low-water datum. It is true they are above low-water datum now, and so the loss this year probably will not be more than a million tons.

But 10 years from now, with the waters at low-water datum, it will amount to over 7 million tons, and that is a pretty important figure, if we get into any more trouble, which I certainly hope we won't, because we will need every ton or iron ore that can be brought down the lakes.

The ship operators on the lakes have built big ships trying to take care of the demands for the national economy as well as for defense and they find that right now they cannot use those ships to full capacity.

It is a loss to us, but I think that unless something is done on these channels, it may be a greater loss to the country as a whole than it is to the ship operators.

LAKE TRAFFIC

The traffic up there is perhaps larger than you people realize. Through the St. Marys River in 1950, the last year for which we have complete figures, it was over 110 million tons, which was an increase of 28½ percent since the present channel was authorized.

In the Detroit River it was 12⅞ million tons, which is an increase of 34 percent since the present channels were authorized.

Eighty to eighty-five percent of the iron ore that issued in these United States comes down those lakes.

So you see the importance of getting down as much as possible.

Deepening will require from 7 to 10 years from the time the study is started, and that is the reason that we feel we must appear here and make a plea for the funds for this study.

GREAT LAKES PROJECT

There are 70 projects on the Great Lakes awaiting appropriation of funds, and this is the only 1 out of the 70 for which we are making a plea, and we do that because of its great importance, not only to shipping, but to the country as a whole.

Thank you very much.

Senator KNOWLAND. Thank you very much.

SUPPORT OF REQUEST

Senator THYE. Mr. Chairman, while Mr. Spencer is here, I want to say I support Mr. Spencer's request for this appropriation.

We at the head of the lakes know exactly what penalties we pay as long as these channels are not improved. That is one reason why I have supported the St. Lawrence seaway project in its entirety. The proposal in the Weir bill only proposes the rapids section in the lower region of the St. Lawrence seaway project. That will not give us relief in the upper regions.

And as to what Mr. Spencer has said about these larger boats, that is a necessity because of the great war emergency.

These boats can be loaded only to the point that will permit them to clear those shallower points in the channel.

For those reasons, I think the request is entirely proper. It is a necessity. The iron ore must all come down through these particular channels from the Mesabi Range.

I certainly hope that we can make available the funds so that this project may be put under study for early development.

Mr. SPENCER. Thank you, sir. What you say is absolutely true. The St. Lawrence Waterway won't accomplish much unless the channel is deepened.

But we feel the deepening of the channel is fully justified, whether or not the St. Lawrence project is built.

Senator THYE. There is never a year, as long as I have been in public service, but what we have been faced with an inadequate transportation system when it came to the moving of grain from up in that central part of the United States.

Of course, the railroads are concerned about their business, yet they have never been able to properly handle the movement of grain

and movement of freight in the busy seasons of the year. That is, of course, harvest time.

This project is an absolute necessity, if we are going to safeguard our steel mills and the great steel industry with an adequate supply of iron ore.

Senator KNOWLAND. Thank you, Admiral.

Mr. SPENCER. Thank you, gentlemen.

Senator KNOWLAND. I might say that tomorrow we have a schedule to hear the Corps of Engineers on their survey and planning programs.

The subcommittee will now recess, to reconvene tomorrow morning at 9:30.

(Thereupon, at 5:15 p. m., Friday, May 15, 1953, the subcommittee recessed, to reconvene at 9:30 a. m., Saturday, May 16, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS FOR 1954

SATURDAY, MAY 16, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 9:30 a. m., pursuant to recess, Senator William F. Knowland (chairman of the committee) presiding.

Present: Senators Knowland, Dworshak, Hayden, and Ellender.

CIVIL FUNCTIONS

FUND REQUIREMENTS

STATEMENT OF GEN. C. H. CHORPENING, ASSISTANT CHIEF OF ENGINEERS FOR CIVIL WORKS

GENERAL STATEMENT

Senator KNOWLAND. The committee will come to order.

General Chorpening, I think it will be helpful to our committee if the engineers could have prepared for this Civil Functions Committee a table showing the funds required as best they can be estimated in the next 5 or 6 fiscal years for those projects that are in the revised budget for fiscal year 1954, so that we can get a little longer term outlook on this situation in our discussions.

General CHORPENING. Yes, sir. We can prepare such a table.

(The table referred to follows:)

Schedule of public works construction programs

[In revised budget for fiscal year 1954]

Project, name, and location	Total estimated Federal cost	Funds appropriated to June 30, 1953	1954	Estimated 1955	Additional funds required, fiscal years—				Balance
					1956	1957	1958	1959	
Alabama: Demopolis lock and dam	$20, 560, 000	$11, 910, 800	$4, 900, 000	$3, 749, 200					
Arkansas:									
Arkansas River and tributaries, Arkansas and Oklahoma (bank stabilization and channel rectification)	18, 852, 300	10, 212, 300	4, 000, 000	1, 921, 000	$1, 410, 000	$509, 000			
Blakely Mountain Reservoir	32, 675, 000	24, 118, 000	5, 500, 000	3, 057, 000					
Bull Shoals Reservoir, Ark. and Mo.	77, 000, 000	74, 329, 000	2, 000, 000	400, 000	271, 000				
Red River levees and bank stabilization below Denison Dam, Ark., Tex., and La.	9, 279, 000	3, 944, 900	565, 000	1, 084, 800	800, 000	800, 000	$800, 000	$800, 000	$484, 300
California:									
Cherry Valley Reservoir	8, 000, 000	7, 269, 900	200, 000	530, 100					
Folsom Dam	58, 560, 000	32, 869, 000	9, 800, 000	10, 607, 300	5, 283, 700				
Los Angeles County drainage area	326, 087, 600	113, 656, 000	7, 975, 000	20, 000, 000	20, 000, 000	20, 000, 000	20, 000, 000	20, 000, 000	104, 456, 600
Pine Flat Reservoir	47, 850, 000	38, 872, 000	3, 150, 000	5, 583, 500	244, 500				
Sacramento River	61, 535, 000	43, 811, 500	4, 000, 000	6, 479, 700	7, 243, 800				
San Antonio Reservoir	8, 351, 000	2, 795, 000	2, 000, 000	3, 556, 000					
Whittier Narrows Reservoir	36, 320, 000	22, 667, 100	6, 200, 000	7, 452, 900					
Florida:									
Central and southern Florida	96, 345, 900	18, 774, 000	800, 000	9, 354, 700	10, 326, 400	10, 330, 100	10, 250, 000	10, 000, 000	26, 510, 700
Jim Woodruff lock and dam, Florida and Georgia	46, 379, 000	31, 513, 000	7, 900, 000	6, 966, 000					
Georgia:									
Buford Dam	41, 013, 000	6, 181, 000	8, 500, 000	10, 600, 000	10, 000, 000	5, 732, 000			
Clark Hill Reservoir, Ga. and S. C.	76, 800, 000	73, 777, 800	2, 250, 000	772, 200					
Jim Woodruff lock and dam, Florida and Georgia (see Florida).									
Idaho:									
Albeni Falls Reservoir	31, 070, 000	19, 866, 000	7, 200, 000	4, 004, 000					
Lucky Peak Reservoir	19, 300, 000	14, 955, 000	1, 900, 000	2, 445, 000					
Illinois:									
Degognia and Fountain Bluff Levee and Drainage District	5, 263, 000	3, 891, 000	600, 000	772, 000					
East St. Louis and vicinity	13, 371, 000	5, 769, 200	600, 000	1, 500, 000	1, 500, 000	1, 500, 000	1, 500, 000	1, 001, 800	
Grand Tower Drainage and Levee District	4, 910, 000	3, 715, 700	475, 000	719, 300					
Mississippi River, between Missouri River and Minneapolis, Minn. (exclusive of St. Anthony Falls, Minn., and lock 19 at Keokuk, Iowa), Ill., Iowa, and Mo.	177, 856, 000	156, 487, 500	70, 000	1, 160, 000	3, 887, 900	7, 171, 100	4, 692, 700	2, 891, 500	1, 495, 300
North Alexander Drainage and Levee District	1, 130, 000	299, 500	340, 000	490, 500					

Wilson and Wenkel and Prairie du Pont Drainage and Levee District	4,182,000	1,577,100	325,000	1,200,000	1,079,900				
Wood River Drainage and Levee District	12,928,000	7,245,000	875,000	1,600,000	1,500,000	1,708,000			
Indiana: Vincennes	4,070,000	888,000	1,280,000	1,094,400	807,600				
Iowa:									
Coralville Reservoir	17,827,000	6,010,100	2,200,000	7,100,000	2,516,900				
Lock No. 19 at Keokuk	19,378,500	1,411,100	4,000,000	7,500,000	3,775,000	2,100,000	592,400		
Missouri River, Kansas City to Sioux City:									
Kansas City to Omaha	109,126,100	78,960,800	3,500,000	5,300,000	5,300,000	5,300,000	3,800,000	3,800,000	3,165,300
Omaha to Sioux City	86,433,000	31,818,100	2,500,000	4,700,000	4,700,000	6,700,000	8,200,000	8,200,000	19,614,900
Kansas:									
Hutchinson	4,713,000	3,573,000	1,140,000						
Kansas Citys, Kans. and Mo	43,625,600	38,549,100	750,000	2,000,000	1,326,500	1,000,000			
Missouri River agricultural levees, Kansas, Iowa, Missouri, and Nebraska	144,036,000	26,797,600	800,000	6,500,000	7,000,000	8,000,000	8,000,000	8,000,000	78,938,400
Wichita and Valley Center	14,139,000	4,653,000	1,650,000	5,360,000	2,000,000	476,000			
Kentucky:									
Covington	8,400,000	5,620,000	1,475,000	1,305,000					
Louisville	27,438,000	23,547,800	1,000,000	2,890,200					
Maysville	6,512,300	3,319,800	1,300,000	1,892,500					
Pineville	1,575,000	274,000	590,000	711,000					
Louisiana: Natchitoches Parish	1,826,100	1,477,100	349,000						
Maryland:									
Baltimore Harbor	10,137,000	8,098,600	440,000						[1] 1,598,400
Cumberland, Md., and Ridgely, W. Va	14,738,100	4,889,200	1,000,000	3,175,000	3,000,000	2,673,900			
Massachusetts:									
Adams	5,054,000	844,000	390,000	2,710,000	1,110,000				
Fall River Harbor	3,017,800	2,497,800	150,000	205,000					[1] 165,000
North Adams	14,276,000	1,183,000	875,000	1,190,000	2,850,000	3,870,000	4,308,000		
Minnesota: Red River of the North, S. Dak., N. Dak., and Minn	12,362,300	3,066,100	925,000	2,883,100	3,349,400	2,138,700			
Missouri:									
Missouri River, Kansas City to mouth	116,441,300	93,722,900	2,300,000	5,000,000	5,000,000	3,000,000	2,000,000	2,000,000	3,418,400
Perry County Drainage and Levee Districts 1, 2, and 3	7,852,600	3,745,400	590,000	1,200,000	1,200,000	1,117,200			
Montana: Havre	2,137,000	450,000	790,000	897,000					
Nebraska:									
Gavins Point Reservoir, Nebr. and S. Dak	60,055,000	10,380,785	12,100,000	22,000,000	14,100,000	1,474,215			
Missouri River, Kenslers Bend to Sioux City, Nebraska and South Dakota	10,191,800	3,787,700	500,000	1,000,000	2,000,000	2,000,000	904,100		
New Mexico: Rio Grande Floodway	5,000,000	393,500	500,000	2,890,000	1,216,500				
New York: Corning (Monkey Run)	5,237,000	2,956,000	985,000	1,296,000					
North Carolina: John H. Kerr Reservoir, N. C., and Va	87,150,000	85,206,000	1,450,000	494,000					
North Dakota: Garrison Reservoir	289,854,000	179,120,700	31,000,000	51,500,000	26,500,000	1,673,300			
Ohio: Cleveland Harbor	25,393,000	15,948,000	3,000,000	1,800,000	3,600,000	1,045,000			
Oklahoma:									
Oklahoma City Floodway	10,460,000	1,180,000	1,800,000	4,000,000	3,480,000				
Tenkiller Ferry Reservoir	22,775,000	22,103,200	200,000	471,800					

[1] Deferred work.

Schedule of public works construction programs—Continued

[In revised budget for fiscal year 1954]

Project, name, and location	Total estimated Federal cost	Funds appropriated to June 30, 1953	1954	Estimated 1955	Additional funds required, fiscal years—				Balance
					1956	1957	1958	1959	
Oregon:									
Amazon Creek	$1,038,000	$372,000	$245,000						
Lookout Point Reservoir	96,611,000	67,176,300	20,000,000	$4,463,700	$396,600	$204,400	$4,370,000		[1] $121,000
McNary lock and dam, Oregon and Washington	282,820,000	217,689,000	27,700,000	19,485,000	15,000,000	2,946,000			
The Dalles Dam, Oreg. and Wash	348,372,000	24,676,000	37,429,000	88,000,000	86,487,000	68,000,000	22,476,000	$17,000,000	4,304,000
Willamette River, bank protection	10,550,000	5,092,400	330,000	870,000	800,000	800,000	800,000	800,000	1,057,600
Pennsylvania:									
Monongahela River: Locks 2	17,233,000	16,663,000	570,000						
Schuylkill River above Fairmount Dam	12,574,000	3,294,000	500,000	2,700,000	4,000,000	2,080,000			
Swoyersville-Forty Fort	4,328,000	995,000	975,000	1,536,000	822,000				
Williamsport	14,500,000	11,487,200	1,175,000	1,837,800					
South Dakota:									
Fort Randall Reservoir	198,485,000	152,897,700	14,700,000	20,000,000	10,887,300				
Oahe Reservoir	293,770,000	16,355,000	8,250,000	32,750,000	45,000,000	45,000,000	50,000,000	50,000,000	46,415,000
Tennessee:									
Cheatham lock and dam	32,200,000	11,605,500	4,835,000	6,800,000	5,959,500	3,000,000			
Old Hickory lock and dam	51,900,000	12,386,000	12,600,000	12,550,000	7,744,000	6,620,000			
Memphis, Wolf River, and Nonconnah Creek	13,430,000	9,235,700	500,000	2,099,037	1,090,460	504,803			
Texas:									
Belton Reservoir	12,752,000	11,389,700	900,000	462,300					
Dallas Floodway	8,114,800	1,331,500	750,000	2,000,000	4,033,300				
Fort Worth Floodway	4,225,000	2,675,000	1,000,000	550,000					
Garza-Little Elm Reservoir	21,322,000	13,447,600	3,635,000	4,039,400	200,000				
Gulf Intracoastal Waterway: Colorado River locks	3,342,900	2,855,900	487,000						
Texarkana Reservoir	33,000,000	19,274,000	7,265,000	6,461,000					
Washington: Chief Joseph Dam	193,250,000	58,495,800	25,000,000	38,150,000	31,700,000	17,400,200	16,200,000	6,304,000	
Total	4,080,667,000	2,056,433,985	333,300,000	499,824,437	372,499,260	236,873,918	158,893,200	130,797,300	292,044,900
Number of projects			78	72	47	33	17	13	

[1] Deferred work.

NOTE.—The amounts shown are to carry on an economical and efficient construction program to meet presently scheduled completion and power-on-line dates.

Senator KNOWLAND. In the proceedings this morning I thought if we could first discuss any language changes which are being recommended, either additions or eliminations, you can perhaps give us your recommendations on that and then we will go into the other items.

General CHORPENING. As the chairman knows, this year our budget presentation is on a completely revised structure. That has been done, I may say, with the full concurrence, of the General Accounting Office and the approval and direction of the Bureau of the Budget It has been necessary to make a number of changes in the appropriation language.

We can discuss them in detail if desired, but I do not believe the chairman would wish that.

Senator KNOWLAND. I think it might be for the purpose of the record important to have at least a brief explanation as to the reasons for these several changes, particularly those which are not obvious on their face.

PROPOSED LANGUAGE CHANGE

General CHORPENING. I have in my hand a statement which shows all the new language that is being proposed in the 1954 budget, Possibly you would like to have a copy of it.

Senator KNOWLAND. We might have this placed in the record and then, rather than going through and duplicating this, if you would pick out what you believe—I assume some of this has more priority than others and there may be certain of these changes which you feel are in a high-priority category. If you could perhaps pick those out.

(Statement furnished committee on language changes follows:)

CIVIL FUNCTIONS APPROPRIATION

1954 LANGUAGE	LEGAL BASIS
The following appropriations shall be expended under the direction of the Secretary of the Army and the supervision of the Chief of Engineers for authorized civil functions of the Department of the Army pertaining to rivers and harbors, flood control, beach erosion and related purposes:	*33 U. S. C. 540.*—Federal investigations and improvements of rivers, harbors, and other waterways shall be under the jurisidiction of and shall be prosecuted by the Department of the Army under the direction of the Secretary of the Army and the supervision of the Chief of Engineers. *33 U. S. C. 701b.*—Federal investigations and improvements of rivers and other waterways for flood control and allied purposes shall be under the jurisdiction of and shall be prosecuted by the Department of the Army under the direction of the Secretary of the Army and the supervision of the Chief of Engineers.
GENERAL INVESTIGATIONS	LEGAL BASIS
For expenses necessary for the collection and study of basic information pertaining to river and harbor, flood control, shore protection, and related projects, and examinations, surveys, and studies of such projects preliminary to authorization for construction, to remain available until expended, $. (33 U. S. C. 426–426c, 540, 541, 701;	Authority for the prosecution of river-and-harbor and flood-control examinations and surveys has been specifically provided for in most river-and-harbor and flood-control acts. Authority is also made available by the Committees on Public Works by the adoption of resolutions calling for reviews of prior navigation and flood-control reports.

GENERAL INVESTIGATIONS

Civil Functions Appropriation Act, 1953.)

LEGAL BASIS

33 U. S. C. 426–426d.—Investigations concerning shore erosion to be undertaken by Beach Erosion Board.

33 U. S. C. 541, 542.—All reports on examinations and surveys to be referred to Board of Engineers for Rivers and Harbors for review.

CONSTRUCTION, GENERAL

For the prosecution of river-and-harbor, flood-control, shore-protection, and related projects authorized by law; detailed surveys, and plans and specifications of projects authorized or made eligible for selection by law (but such surveys shall not constitute a commitment of the Government to construction); alteration of bridges; and not to exceed $3,950,000 for transfer to the Secretary of the Interior for conservation of fish and wildlife as authorized by law; to remain available until expended, $: *Provided*, That no part of this appropriation shall be used for projects in the Columbia River Basin which are authorized by a law limiting the amount to be appropriated therefor, except as may be within the limits of the amount now or hereafter authorized to be appropriated. (16 U. S. C. 661–666, 756; 33 U. S. C. 511–523, 540, 701; 55 Stat. 638; 66 Stat. 635; 66 Stat. 732; Civil Functions Appropriation Act, 1953.)

LEGAL BASIS

Authorization for construction of individual projects is contained in various river-and-harbor and flood-control acts.

33 U. S. C. 703, 704.—Authorization for Sacramento River flood-control project.

33 U. S. C. 426e–h.—Provide for Federal aid in protection of shores or for construction by Chief of Engineers.

33 U. S. C. 511–523.—Alteration of bridges over navigable waters under control of Secretary of the Army and Chief of Engineers.

16 U. S. C. 661–666, 756.—Cost of construction of means for conservation of fish and wildlife to be included as part of cost of Federal water-resource projects.

OPERATION AND MAINTENANCE, GENERAL

For expenses necessary for the preservation, operation, maintenance, and care of existing river-and-harbor, flood-control, and related works; surveys and charting of northern and northwestern lakes and connecting waters; clearing and straightening channels; removal of obstructions to navigation; rescue work, and repair, restoration, or maintenance of flood-control projects threatened or destroyed by flood; and not to exceed $870,000 for transfer to the Secretary of the Interior for conservation of fish and wildlife as authorized by law; to remain available until expended, $. (16 U. S. C. 661–666, 756; 33 U. S. C. 1, 414, 415, 540, 603a, 701, 701n, 705; Civil Functions Appropriation Act, 1953.)

LEGAL BASIS

Authority for operation and maintenance of river-and-harbor and flood-control projects is derived from various acts authorizing construction either by virtue of express language of cited documents or by necessary implication.

33 U. S. C. 5.—Secretary of the Army and Chief of Engineers authorized to operate and maintain navigation projects.

Surveys of the Great Lakes for special purposes were made by the Corps of Engineers as early as 1816. However, systematic work did not start until 1841. The sundry civil act of March 4, 1911 provided that the survey be extended to include the lakes and other natural navigable waters embraced in the navigation system of the New York canals. The act of June 23, 1913 provided for including Lake Champlain.

33 U. S. C. 603a.—Authorizes Secretary of the Army and Chief of Engineers to expend funds for clearing and straightening channels in interest of navigation or flood control.

LEGAL BASIS

33 U. S. C. 414, 415.—Authorize removal of watercraft obstructing navigation.

33 U. S. C. 701n.—Authorizes emergency fund for rescue work and for repair and maintenance of projects threatened by flood.

16 U. S. C. 661–666, 756.—Cost of maintenance of means for conservation of fish and wildlife to be included as part of cost of Federal water-resource projects.

GENERAL EXPENSES

For expenses necessary for general administration and related functions in the Office of the Chief of Engineers and offices of the division engineers; activities of the Board of Engineers for Rivers and Harbors, the Beach Erosion Board, and the California Debris Commission; administration of laws pertaining to preservation of navigable waters; commercial statistics; and miscellaneous investigations; $. (22 U. S. C. 226; 33 U. S. C. 426–426h, 441–451, 541, 661, 678, 683, 701, 703, 704; 66 Stat. 596; Civil Functions Appropriation Act, 1953.)

LEGAL BASIS

33 U. S. C. 1.—Authorizes regulations for administration of navigable waters.

33 U. S. C. 541.—Establishes Board of Engineers for Rivers and Harbors.

33 U. S. C. 426.—Establishes Beach Erosion Board.

33 U. S. C. 661.—Creates California Debris Commission.

22 U. S. C. 275a.—Provides for support of Permanent International Commission of Congresses of Navigation.

33 U. S. C. 441–454.—Authorizes supervision of deposit of refuse in New York Harbor.

FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES

For expenses necessary for prosecuting work of flood control, and rescue work, repair, restoration or maintenance of flood control projects threatened or destroyed by flood, as authorized by law (33 U. S. C. 702a, 702g–1), to remain available until expended, $. (Civil Functions Appropriation Act, 1953.)

LEGAL BASIS

33 U. S. C. 702–702n.—Authorizes construction and operation of Mississippi River flood control project.

33 U. S. C. 702g–1.—Authorizes emergency fund for rescue work and for repair and maintenance of projects on Mississippi River tributaries threatened by flood.

NIAGARA POWER DEVELOPMENT

To remain available until expended, $. (Civil Functions Appropriation Act, 1953.)

LEGAL BASIS

Treaty with Canada covering uses of water of Niagara River ratified by United States Senate, August 9, 1950. Treaty Series 2130.

Senate Public Works Committee, Resolution 5, June 1951, to review previous Niagara River reports.

ADMINISTRATIVE PROVISIONS

The foregoing appropriations shall be available for examination of estimates of appropriations in the field and for printing, either during a recess or session of Congress, of survey reports authorized by law, and such survey reports as may be printed during a recess of Congress shall be printed, with illustrations, as documents of the next succeeding session of Congress: *Provided*, That the unexpended balances on June 30, 1953, of sums heretofore appropriated for the Corps of Engineers

ADMINISTRATIVE PROVISIONS

for river and harbor and flood control activities which were made available until expended shall be classified under the corresponding heads, herein established, shall be transferred to and merged with the amounts appropriated under those heads and shall be available for the purpose therein specified (Civil Functions Appropriation Act, 1953).

REVOLVING FUND

For establishment of a revolving fund, to be available without fiscal year limitation, for expenses necessary for the maintenance and operation of the plant and equipment of the Corps of Engineers used in civil works functions, including acquisition of plant and equipment, maintenance, repair, and operation of aircraft, temporary financing of services finally chargeable to appropriations for civil works functions, and the furnishing of facilities and services for military functions of the Department of the Army and other Government agencies and private persons, as authorized by law, $; and in addition, the Secretary of the Army is authorized to provide capital for the fund by capitalizing the present inventories, plant and equipment of the civil works functions of the Corps of Engineers. The fund shall be credited with reimbursements or advances for the cost of equipment, facilities, and services furnished, at rates which shall include charges for overhead and related expenses, depreciation of plant and equipment, and accrued leave: *Provided*, That on July 1, 1953, (1) the fund shall assume the assets, liabilities, and obligations of the plant accounts, as carried on the records of the Corps of Engineers as of June 30, 1953, under the appropriations for "Maintenance and improvement of existing river and harbor works", "Flood control, general", and "Flood control, Mississippi River and tributaries", and (2) there shall be transferred from said appropriations to the fund amounts equivalent to the unexpended cash balances of the plant accounts on June 30, 1953: *Provided further*, That the total capital of said fund shall not exceed $140,000,000: *Provided further*, That during the current fiscal year said fund shall be available for purchase (not to exceed three hundred, for replacemtnt only) and hire of passenger motor vehicles.

LEGAL BASIS

5 U. S. C. 78b.—No appropriation shall be available for maintenance or operation of aircraft unless specifically authorized by the appropriation concerned.

58 U. S. C. 78.—No appropriation shall be used to purchase or hire passenger cars unless specifically authorized by the appropriation concerned.

General CHORPENING. We feel, Mr. Chairman, that all of the changes that are proposed are essential for the new appropriations structure.

In reality we are not asking for more authority than we have had before. It is a matter of changing the language so as to make it conform to our new structure.

Senator KNOWLAND. I see.

REVOLVING FUND

General CHORPENING. The only new item I should mention is the revolving fund. For many years we have carried a plant account, which has been used as a clearing-house, shall we say, for our accounts, our plant rentals are charged and carried in the plant accounts.

But it has not been a type of operation which permitted the close control that we think and the Budget thinks and the General Accounting Office thinks we should have. So we are setting up in the budget structure this year a revolving fund—the amount requested is $100, just a token amount to establish the fund.

If you desire to go into that more thoroughly at this time, I do have our Comptroller people here who could explain that.

Senator KNOWLAND. I think it might be desirable, because Congress in certain other departments and agencies has taken a rather dim view of revolving funds. Therefore, if there is a particular reason for this, I think that we had better have a reasonably good explanation in the record.

General CHORPENING. Yes, sir. On page 9 of the paper that I just handed the chairman is the language to set up the revolving fund, and on pages 435 to 438 of our justification sheets is the detailed information supporting the setting up of this revolving fund. I would like to say again that this has been set up by us with the full cooperation, knowledge, and approval of the General Accounting Office and of the Bureau of the Budget.

Now to give a little more explanation of it I would like to have Mr. Oksner, of our Comptroller's Office, give the chairman a description of just how this fund is set up and how it operates.

Senator KNOWLAND. In your explanation, could you indicate what you will be able to do under this language that you are not now permitted to do or what you are now permitted to do that you will not be able to do under the new language, Mr. Oksner.

Mr. OKSNER. Mr. Chairman, this fund will centralize operations we have been carrying on under three existing funds to finance the common services and facilities used in the performance of work for the appropriations and projects under the civil works functions of the corps.

The present setup is that the plant account is split between the "Maintenance and improvement of existing river and harbor work," "Flood control, general," and "Mississippi River and tributaries."

The work performed is billed to the various projects out of this plant account and reimbursed to recover the capital cost of the assets used as well as the expenses.

For example, shop facilities, or dredges are used on several of the appropriations in a district. The revolving fund will centralize this type of operation, so that the funds appropriated for the projects will be separate and distinct from the equipment account maintained under this revolving fund.

METHOD OF DEPRECIATION

Senator KNOWLAND. Is that reimbursed on a fixed depreciation basis or rental basis? How is it worked out?

Mr. OKSNER. It is reimbursed at actual cost including depreciation. Our depreciation is computed on a straight-line basis. Reimbursement for depreciation costs is intended to keep the corpus of the fund intact.

Senator KNOWLAND. You mentioned the dredge. How long do you give for the life of a dredge for depreciation purposes?

Mr. OKSNER. I believe it is 25 to 50 years.

General CHORPENING. It would not be the same for each item, it depends on the type of operation and the dredge. Incidentally, we have not placed a new dredge in commission since 1949 nor do we have any under construction or propose to buy any now.

Senator KNOWLAND. The only point I was trying to get at, General, is your rate of depreciation upon which this reimbursement is made to the fund from the project. Similar to the depreciation basis that a private firm uses for tax purposes, or do you have an accelerated depreciation that you use, or do you have an extended period of depreciation?

General CHORPENING. In getting up our charges for depreciation we endeavor in each instance to make the best estimate of the reasonable life of the item of plant. We take into account the annual maintenance charges. Essentially we use the same basis as contractors use in depreciating theirs.

Mr. OKSNER. For tax purposes I believe there is an accelerated rate used, whereas, we use the estimated service life, without regard to any tax problem involved.

Senator KNOWLAND. That is true particularly on certain of the war industries that have come in on this accelerated depreciation but I was thinking more in the terms of normal types of depreciation used before this accelerated program was established.

Mr. OKSNER. I have a statement here regarding how this fund will be used.

Senator KNOWLAND. I think, if it appears to be not too long, you might read it.

ESTABLISHMENT OF ACCOUNTS

Mr. OKSNER. Accounts will be established to record all assets, liabilities, income and expenses of the "Revolving fund." Those accounts will be used to prepare the budgetary and accounting statements which consist of "Source and application of funds statement," "Income and expense statement," and "A balance sheet," and the necessary supporting schedules.

I would like to inject in there that the supporting schedules will be used primarily for management control of the operation of the fund. They go into much more detail than the basic statements required by the Bureau of the Budget.

LIMITATION ON TRANSACTIONS

2. The transactions to be initially financed by the "Revolving fund" will be limited to the following types:

(*a*) Transactions which will be reflected as expenditures of the "Revolving fund" to be billed at cost to the other agencies, projects and appropriations, and which will be reflected as income of the "Revolving fund."

(1) Financing of common inventories for civil works functions, such as bulk materials and supplies.

(2) Operation of common storehouses which serve more than one civil works project or appropriation.

(3) Acquisition of construction and operating facilities which are to serve more than one civil works project or appropriation, such as dredges, concrete mixing plants, shops and transportation equipment.

(4) Operation and maintenance of such construction and operating facilities used for more than one civil works project or appropriation.

(5) Financing of work or services performed for other governmental agencies, including military functions of the corps, States, municipalities and individuals or corporations outside the Federal Government on a reimbursable basis, such as engineering and design work, and non-Government dredging inspections.

(6) Financing common services of the district office, such as transportation, utility operations, supervision and general expenses.

(*b*) Transactions which are paid initially from the fund for only accounting expediency and which will be transferred as direct charges to applicable appropriations under the related object classes. The billings for these charges will not be reflected as revolving-fund income but will be recorded as offsets to the expenditures in the accounts of the revolving fund, the net result being zero.

(1) These include primarily the initial payment of labor charges for personnel employed at civil-works project locations, which will be transferred to the applicable appropriation and will appear as "01 Personnel services" under the appropriations of the project at which the employees work.

That will serve to get the "01 Personnel" obligations charged to the appropriations where the employees actually work as distinguished from the personal services of common-type services in the district office.

EXPENDITURES NOT UNDER REVOLVING FUND

The revolving fund will not be used to finance the cost of the following classes of expenditures;

(*a*) Temporary construction facilities built or acquired for the use of a single civil-works project, or for military activities.

(*b*) Equipment and facilities acquired for the use of a single project—that is, equipment which is to become a part of the project operating equipment.

(*c*) Contractors' payments and the purchase of equipment and supplies under specifications for a particular project, such as generators, turbines, to be installed in the project.

(*d*) Labor changes relating to personnel employed at military projects, or engaged exclusively in military-procurement activities.

(*e*) Financing of inventories exclusively for military activities.

(*f*) Operation of storehouses exclusively for military activities.

(*g*) Acquisition, operation, and maintenance of construction and operating facilities exclusively for military activities.

That last part is mentioned here to show specifically that the revolving fund is for the civil-works functions and might incidentally furnish services to military activities under section 601 of the Economy Act.

EFFECTS OF PROPOSED LANGUAGE CHANGE

Senator KNOWLAND. The $64 question which perhaps I should understand from your statement but I am perhaps, not as clear as I should be, what are you going to be able to do under this language proposed in the bill that you are not now able to do?

Mr. OKSNER. The thing we will be able to do under this language is to divorce obligations such as for common stock which is not actually used on the project from the appropriations for the project.

Right now the plant account is carried under one appropriation in a district but actually the items are being used on several appropriations.

General CHORPENING. I would like to add to that, Senator, we have had plant accounts in three appropriations, "Mississippi River and tributaries," "Rivers and harbors," and "Flood control, general."

There has never been under that plant account any set up in our budget structure where the Bureau of the Budget or the General Accounting Office or the Congress could really see the operation of this part of our activities.

This formalizes that plant account as we called it before, puts it all together, and puts it in a condition where we can quickly show what the operations have been and it is there for all to see, for me as the manager, and for those who have the responsibility for looking over our operations and programs.

SIMPLIFICATION OF OPERATION

I think that really sums it up. We think this is going to, and I believe it will, in the overall simplify the operation of these funds. I know it will give me something that I would like to have, a better control of these operations.

There are quite good-sized sums that flow through the plant accounts and will flow through this revolving fund. It is something that should have close attention by all.

Senator KNOWLAND. What will this revolving fund amount to?

Mr. OKSNER. I have statements here, Senator. The first statement represents the movement of cash in and out of the fund, estimated for 1953 and 1954, showing the actual for 1952. That consists of two pages. The next statement shows the operation of the fund. This is a statement of income and expense, also actual for 1952 and estimated for 1953 and 1954. It is set up in a profit-and-loss statement presentation.

Now the statement C, which is on pages 3–A, and 3–B, shows the assets, liabilities and corpus of the fund.

The estimated status of the fund for 1954 shows total assets of approximately $153 million liabilities estimated at approximately $25 million and the net worth for investment of the United States Government estimated at $128 million. That includes all of the plant now existing, all of the stocks and equipment existing in the present plant.

General CHORPENING. All of our dredges, all of our boats, all of our standing plant, shops and stocks in warehouses.

Senator KNOWLAND. Is this figure at the original investment or depreciated value as of now?

General CHORPENING. This is the depreciated value as of now.

ORIGINAL-COST BASIS

Senator KNOWLAND. Do you have, as a matter of information, what the original-cost basis of this same equipment and plant is?

General CHORPENING. We have that; yes, sir.

Senator KNOWLAND. Will you furnish that for the record?

General CHORPENING. You would want that of the plant items. To get it in all the small items in our warehouses would be a tremendous task.

Senator KNOWLAND. Just the items of plant.

Mr. OKSNER. We have on this statement a figure of $189,759,839 on the fixed assets for land, structures, and equipment.

Do you wish to have the detail of that?

Senator KNOWLAND. No. I would not want the detail of that but I wanted to find out this figure of $128 million you mentioned, whether it was the original cost basis or depreciated value; that is what I wanted.

I understand from the general it is the present depreciated value as of the present time.

Mr. OKSNER. Yes. The original value, cost value of the fixed assets is $189,759,839 estimated for 1954.

The depreciation applicable to that is $80,864,708 as shown on page 3–A of this statement.

(The statement referred to follows:)

Following is a breakdown of figures referred to:

	Original cost	Depreciation
Plant	$136,781,804	$58,055,741
Small tools and equipment	21,538,456	11,259,906
Shops and yards	20,851,873	7,447,089
Office buildings and grounds	10,587,706	4,101,972
Total	189,759,839	80,864,708

Senator KNOWLAND. Then presumably the difference between that figure and the one you have given represents supplies.

Mr. OKSNER. There is inventory estimated at $12,714,210; deferred items of approximately $6 million; cash of approximately $19 million; accounts receivable $6.7 million, liabilities $25.5.

ACCOUNTS RECEIVABLE

Senator KNOWLAND. With respect to accounts receivable, without going into detail on the situation, could you give the committee an example, for instance, of how long a period would elapse before those accounts receivable would be payable to you?

Is this a case where you have done some work which is chargeable to someone else, and you are awaiting payment on it.

Mr. OKSNER. I would say at least 90 percent of those accounts receivable are collected within 60 days after the performance of the work.

Senator KNOWLAND. Do you have any accounts receivable in that list, that say, have gone for over 6 months or a year's time?

Mr. OKSNER. I do not think they would have gone for over a year's time. They may go approximately 6 months time but they would represent possibly the commercial type of receivables.

Most of our work is for projects and other governmental agencies. Only a very small percentage that go over 6 months.

Senator ELLENDER. Such as what?

Mr. OKSNER. Among the receivables are items in connection with Government inspection of dredging done by local interests. That may be receivable from a municipality or from a contractor.

Possibly the contractor may delay payment. The municipality may also delay payment.

PAST DUE ACCOUNTS

Senator KNOWLAND. I was trying to find out about the item of $6 million, as to whether or not you had any substantial part of your accounts receivable that actually were past due or to the extent where in a business firm they would be written off because the firm you did the work for had gone bankrupt and was not able to pay the Government. I was trying to determine whether this was actually a totally collectible item, or whether there was a considerable amount in that $6 million which we might not be likely to collect.

Mr. OKSNER. The amount we might not collect may range to $1,000 in any 1 year.

Senator KNOWLAND. So it is a relatively small portion.

Mr. OKSNER. Very small.

Senator KNOWLAND. I remember some years ago as a member of the War Investigating Committee, where we were going into the question of surplus property and also inventories of the Government at some of the Army supply depots, we found a lot of strange items including what apparently were parts of wagons from the days of the wagon trains.

INVENTORY CONTROL

I wondered how much of your inventory might be considered dead inventory and being carried there but actually of very little use to the engineers.

What kind of an inventory control do you have?

General CHORPENING. I can say this, Senator, that you won't find any Civil War wagons in the civil-works side of the Corps of Engineers.

We in my office and divisions and district offices are continually endeavoring to clean out our old stocks and obsolete or obsolescent material.

You do appreciate that before we can dispose of it there is quite a lengthy procedure required by law. We have to circulate it around to various Government departments and then as I recall it, that has to be turned over to the General Services Administration for disposal.

Now, on that account, we do have a little more stock on hand than I would like to see but I have investigated all possible ways to expedite that procedure and I think we have disposed of it as fast as practicable.

When I was in the field and since I have had this present position, that is one of the things I am always looking into.

Some people are pack rats and want to load up the warehouses and hang on to old equipment.

I do not believe in it. It is not economy. It is using up space and taking the time of people. We are trying to keep that alive and not accumulate equipment or materials that just simply are not going to be used.

SURPLUS MATERIAL

Senator KNOWLAND. Could you give the committee a measure—for instance, take the year 1952 or 1951—of the amount of material that you have declared surplus for disposal by the General Services Administration?

Mr. OKSNER. We can get that information.

Senator KNOWLAND. Just so we would have an idea of whether it amounts to hundreds of thousands of dollars or millions, or just what is involved.

General CHORPENING. We can supply that.

(The information referred to follows:)

During the calendar year 1952, the corps disposed of approximately $4,500,000 cost value of surplus property through the General Services Administration and approximately $3,400,000 cost value of surplus property through direct sales or through transfers to other Government agencies. As of the end of 1952 there was approximately $1,400,000 cost value of surplus property reported to the General Services Administration awaiting disposal action.

SALES OF COMMODITIES

Senator KNOWLAND. You may proceed.

Senator ELLENDER. I notice here you have sales of commodities. What would that incorporate?

Mr. OKSNER. That represents the issue of supplies to the projects. In revolving funds—this being a business-type setup, it disposes of their supplies to the projects and it represents an income from sale on the revolving fund account.

Senator ELLENDER. Projects such as what, groceries or things of that kind to the men working on the projects?

Mr. OKSNER. To some extent the thing does include that.

General CHORPENING. To a very slight extent.

Senator ELLENDER. Do you have a commissary?

General CHORPENING. This would be the issue of materials such as cement, items of plumbing, or electrical items, or carpenter items held in a warehouse and issued to specific projects.

Senator ELLENDER. Are those for projects you are hired to perform for other Government agencies or some you do on your own?

General CHORPENING. As you know, down on the Mississippi River we do quite a little hired labor in connection with the sinking of concrete revetments. We buy the reinforcing for the mat, that would go into this account and be charged in and out.

And the cement we would buy would go into this account and be charged out as needed for the job.

Senator ELLENDER. Have you special places where you keep this, a store that is operated for that purpose?

General CHORPENING. Yes, sir.

Senator ELLENDER. How do you buy, wholesale or by advertising?
General CHORPENING. By advertising.

MAINTENANCE WORK IN ALASKA

Senator DWORSHAK. Does that program operate in Alaska insofar as the Army engineers are concerned with construction work in the Territory?

General CHORPENING. We have little or no work going on in Alaska now under the "Civil functions," a little maintenance, I think occasionally on a couple of harbors up there.

PURCHASE OF RAILS

Senator DWORSHAK. A few weeks ago in a hearing before the Interior Appropriations Committee, the superintendent of the Alaskan Railroad, which is federally owned, testified that they had sold several hundred tons of rails and other scrap for a pittance and that within a few months the Army Engineers Corps in Alaska had repurchased them at, as I recall it, 500 percent profit.

The question arises whether there was any connection between the Army engineers office in the territory and the federally owned railroad because it was apparent that there was no justification for that kind of operation where the Federal Government was being victimized, and exploited by scrap dealers in the territory.

Do you know anything about that?

General CHORPENING. No. sir, We do have a district in Alaska, but practically all of the work that is done in Alaska is on the military functions of the corps.

Now I would like to get the details on that transaction and I would——

Senator DWORSHAK. The Army Engineering Corps took a terrific beating that day at the hearing and I have always held a high regard for the efficiency of our corps and I was just wondering why there had not been more liaison so that the various agencies and departments of the Federal Government would cooperate and try to get greater economy in the handling of some of these materials like rails which are essential.

General CHORPENING. Were we represented?

Senator DWORSHAK. No, sir; it was the Interior Department, and the representatives of the General Accounting Office and also the Alaskan Railroad.

Senator KNOWLAND. I would like to request a statement in regard to this particular situation, while it may not directly involve at the moment the civil functions of the engineers, since it has been raised by Senator Dworshak. If there is a loophole there may be it needs to be plugged and we might run into the same type of a situation in civil functions if we do not plug it now, because in due time it will be found that we have more civil-function activities in Alaska. Undoubtedly General Chorpening, as much as anyone else, would want to be sure that situation did not happen in the civil-functions activities.

General CHORPENING. Yes, sir. Would this have been recorded in the hearings and can we get the data?

Senator DWORSHAK. Yes, the clerk can give it to you in a little while if you did not want to wait until the hearings are released.

Senator KNOWLAND. I think maybe our own committee would make the request.

Senator DWORSHAK. I think it would be a matter of self-defense in demonstrating you were not responsible, if you were not responsible, for that district incident.

General CHORPENING. I very much appreciate the Senator's bringing it to my attention.

(The statement referred to was not received at time record was printed).

Senator KNOWLAND. Any further questions on this revolving fund? All right, General, you may proceed. If there is any other language change of that nature, otherwise the explanation which you put in the record will be, I think, sufficient for the committee unless you want to underscore anything.

General CHORPENING. Oh, I do not believe any of the other language changes are of sufficient import to be commented upon specifically, sir.

Senator KNOWLAND. You may proceed then. I think it is on page 5 on the surveys and general investigations.

PROMPT SUBMISSION OF BILLS BY MANUFACTURERS

General CHORPENING. Before we go on to that, Senator, there are a few outstanding reports earler in the hearings where we were called upon. I am thinking about the request in connection with the possibility that manufacturers might not be submitting bills on time and there was a question raised about the trend in our bids.

Would you like to have me report on those at this time?

Senator KNOWLAND. Yes, if you will.

General CHORPENING. The question was raised in connection with General Potter's testimony on the possibility that large equipment manufacturers of generators or of turbines might not be submitting bills for progress payments promptly in order to defer payments for tax advantage.

I was asked to look into that matter throughout the country to see whether or not there were indications that such procedure was being followed.

I have checked with our division engineers in those parts of the country where that would be particularly applicable, the South Pacific Division, the North Pacific, the Southwestern and the South Atlantic.

I have been advised this situation does not generally exist. It is pretty difficult to really get at it but on the face of what we can ascertain it does not exist. The indications are that the bills are generally being submitted promptly and furthermore paid promptly.

(The following classification schedules were supplied:)

GENERAL INVESTIGATIONS

CLASSIFICATION SCHEDULES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate (obligations incurred)			$5,500,000
Comparative transfer from—			
"Maintenance and improvement of existing river and harbor works"	$1,058,079	$1,511,393	
"Flood control, general"	1,931,149	2,434,302	
Total obligations	2,989,228	3,945,695	5,500,000

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Examinations and surveys:			
(a) Navigation studies	$362,985	$616,531	$600,000
(b) Flood-control studies	329,549	1,321,781	1,500,000
(c) Beach-erosion studies	240,417	401,779	150,000
(d) Special studies	1,155,117	1,014,189	2,250,000
2. Collection and study of basic data:			
(a) Stream gaging	690,672	517,667	452,000
(b) Precipitation studies	60,165	4,519	275,000
(c) Fish and wildlife studies	58,107	40,414	55,000
(d) Miscellaneous studies	83,579	28,815	218,000
Total direct obligations	2,980,591	3,945,695	5,500,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Examinations and surveys:			
(b) Flood-control studies (Corps of Engineers, military functions)	2,843		
(c) Beach-erosion studies (Department of the Navy)	5,794		
Total obligations payable out of reimbursements from other accounts	8,637		
Total obligations	2,989,228	3,945,695	5,500,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions		296	361
Full-time equivalent of all other positions		5	4
Average number of all employees		288	350
Average salaries and grades:			
General schedule grades:			
Average salary		$4,421	$4,421
Average grade		GS–7.2	GS–7.2
Ungraded positions: Average salary		$3,000	$3,000
01 Personal services:			
Permanent positions		$1,262,651	$1,544,071
Part-time and temporary positions		15,000	12,000
Regular pay in excess of 52-week base		4,849	5,929
Payments above basic rates		17,500	18,000
Total personal services		1,300,000	1,580,000
02 Travel		55,000	77,000
03 Transportation of things		2,000	3,500
04 Communication services		100	100
05 Rents and utility services		5,000	5,500
07 Other contractual services		655,015	963,500
Services performed by other agencies		416,600	800,000
Services performed by "Revolving fund, Corps of Engineers"		1,459,190	2,003,100
08 Supplies and materials		50,000	70,000
13 Refunds, awards, and indemnities		250	250
15 Taxes and assessments		2,540	4,050
Total obligations		3,945,695	5,500,000

Senator KNOWLAND. General, will you furnish a table for the committee showing the unobligated and unexpended balances for the Corps of Engineers for surveys, at the end of the last reporting period and your estimate of the unexpended and unobligated balance at the end of the fiscal year 1953.

(The information referred to follows.)

Unexpended and unobligated balances, survey report program as of Mar. 31, 1953, and as estimated for June 30, 1953

	Mar. 31, 1953		Estimated June 30, 1953	
	Unobligated [1]	Unexpended	Unobligated [1]	Unexpended
Navigation studies	$188,000	$210,900	$58,000	$65,000
Flood-control studies	434,600	540,200	38,000	47,000
Beach-erosion studies	24,800	24,800	18,000	18,000
Arkansas-White-Red	166,400	177,800	26,000	28,000
New England-New York	72,800	133,800	----------	10,000
San Francisco Bay	8,700	8,700	----------	----------
Great Lakes levels	29,400	37,000	----------	----------
Reserve	[2] 50,000	[2] 50,000	----------	----------
Total	974,700	1,183,200	140,000	168,000

[1] Unobligated balances are included in unexpended balances.
[2] Held in reserve for Arkansas-White-Red and New England-New York. Allotted in April 1953.

General CHORPENING. Yes, sir.

Senator KNOWLAND. Show what is the total backlog for your survey program both in terms of number of reports, and the estimated cost and what surveys do you plan to conduct with the funds requested this year?

General CHORPENING. Yes. You would like that submitted?

Senator KNOWLAND. Yes, sir.

General CHORPENING. We have all that data here.

(The information referred to follows:)

The total number of navigation and flood control reports now outstanding in the field offices is 758 (as of April 24, 1953). The total estimated cost is approximately $46,200,000, of which approximately $23,300,000 has been made available through the fiscal year 1953.

The following table shows the reports tentatively scheduled for prosecution during fiscal year 1954 within the approved budget estimate.

Examinations and surveys, civil works budget as approved by Bureau of Budget, fiscal year 1954 (Apr. 21, 1953)

	Revised approved budget estimate
General investigations:	
1. Examinations and surveys:	
(*a*) Navigation studies	$900,000
(*b*) Flood-control studies	
(*c*) Beach erosion studies	125,000
(*d*) Special studies:	
(1) Arkansas-White-Red Rivers	515,000
(2) New England-New York survey	710,000
(3) San Francisco Bay, Calif	100,000
(4) Great Lakes water levels	50,000
Subtotal, examinations and surveys	2,400,000

Breakdown of navigation and flood control studies (items 1 (a) and 1 (b)) by Corps of Engineers—Preliminary and tentative, Apr. 21, 1953

Report and district	Allocation fiscal year 1954	
	Navigation	Flood control
New England division:		
Cape Cod Canal, Mass	$15,000	
Boston Harbor Reserved Channel, Mass	9,000	
Bridgeport Harbor, Conn	10,000	
New York district: New York and New Jersey Channels, Arthur Kill, N. Y	13,000	
Baltimore district: Baltimore Harbor, Md	13,000	
Jacksonville district: San Juan Harbor, P. R	18,000	
New Orleans district:		
Streams and bayous in southern Louisiana	25,000	$50,000
Gulf Intracoastal Waterway, La. and Tex	20,000	
Galveston district:		
Gulf Intracoastal Waterway, La. and Tex	45,000	
Port Aransas-Corpus Christi Waterway, Tex	23,000	
Trinity Bay Soil Conservation District, Tex		35,000
Ft. Worth district: Trinity River, Tex., Richland, Chambers, and Cedar Creeks		30,000
Albuquerque district: Rio Grande and tributaries at Albuquerque, N. Mex		25,000
Rock Island district: Rock River, Ill. and Wis		15,000
St. Paul district:		
Mississippi River at St. Paul, Minn		40,000
Minnesota River, main stem, urban areas		50,000
Red River of the North, Crafton, Minn		25,000
Omaha district: Platte River, Nebr		25,000
Garrison district: Cannonball River, N. Dak		17,000
Louisville district: Wabash River above White River, Ind		45,000
Pittsburgh district: West Fork River, W. Va		14,000
Duluth district: Duluth-Superior Harbor, Minn. and Wis	50,000	
Milwaukee district: Grand River, Mich		25,000
Detroit district:		
Maumee River, Ind., and Ohio		41,000
Toledo Harbor, Ohio	9,000	
Los Angeles district: Mojave River, Calif		27,000
Sacramento district: Sacramento-San Joaquin Delta, Calif		24,000
San Francisco district: Alameda Creek, Calif		25,000
Portland district: Lower Columbia River, Oreg. and Wash		37,000
Seattle district: Okanagon River, Wash		20,000
Alaska district: Rivers and harbors of Alaska	50,000	30,000
Total (22 districts)	300,000	600,000

Summary

Navigation reports:	
Number	11
1954 allotment	$300,000
Flood-control reports:	
Number	19
1954 allotment	$600,000
Total reports:	
Number	30
1954 allotment	$900,000

Senator ELLENDER. In giving that information don't you keep some on hand to make your surveys that may probably come up later that you do not know of now?

General CHORPENING. Well, in recent years our appropriations have been so limited that there has been little or no carryover.

GENERAL SURVEYS

Senator KNOWLAND. Could you indicate on the table you are submitting the amount in the revised budget, and what surveys you are presently planning to conduct with the survey funds requested?

General CHORPENING. Yes, sir. The funds requested consist of $900,000 for general surveys this year. Our directive from the Direc-

tor of the Budget states that this sum of $900,000 will be applied to a limited number of authorized general navigation and flood-control studies of recognized high priority.

Accordingly we are proposing at this time to allot these funds to a total of 30 outstanding survey and preliminary examination reports, 11 navigation reports and 19 flood-control reports.

I believe it will be interesting to the committee to have a little information now on what this program consists of.

REPORTS OUTSTANDING

As of the 24th of April there were still outstanding a total of 954 reports, including favorable ones completed by the Corps of Engineers but not acted upon by Congress.

The committee understands that these result from either directives of the Congress in authorization bills to make studies or resolutions of either the Senate or the House Public Works Committee to review earlier reports.

Senator KNOWLAND. Was the figure 954?

General CHORPENING. Yes, sir.

Senator KNOWLAND. Of the 954, could you tell us what number are those on which work was actually started by the Engineers but are in an incompleted status?

General CHORPENING. I do not know whether I have that figure here. Mr. Brennan, do you know whether that would be here or not?

Can you get that for us?

(The information referred to follows:)

Number of reports started or completed	718
Number of reports not started	236
Total	954

Senator KNOWLAND. The committee would like to know whether there is anything left dangling and what amount would be necessary to complete the job that is already underway.

General CHORPENING. I think we will find approximately 75 percent of those we have been able to do something on.

BAYOU LA FOURCHE PROJECT

Senator ELLENDER. You have a lot of smaller ones. For instance I took the matter up with the engineers about 6 months ago, a little project on Bayou LaFourche.

I do not recall the amount involved but it was a small amount.

This survey was to be made so as to give information to various municipalities and parishes that needed it in order that they could spend money wisely to get water from the Mississippi River.

Now for a little project of that kind don't you have some kind of reserve fund?

General CHORPENING. All those surveys must come out of this fund we are now discussing.

Senator ELLENDER. Do you set aside a certain amount for such contingencies?

General CHORPENING. We do, to take care of some contingencies that arise. We are able at times to put some in. We have that flexibility.

Senator ELLENDER. It strikes me you ought to have some amount within reason for that purpose because you save yourself money in the long run because in the case in which I am speaking, if you recall, it was just a case of completing work you had previously done, turn that over to municipalities and local authorities that actually did the work.

Senator KNOWLAND. I might call the Senator's attention to the exact language in the report last year. It says:

> The committee also desires that the Corps of Engineers complete the report on Bayou LaFourche at an estimated cost of $15,000 with the funds made available in the fiscal year 1953.
>
> It is understood that the field work on this report has been completed.

General CHORPENING. Mr. Brennan is Chief of our Survey Branch, and can explain the situation.

Mr. BRENNAN. The amount of $12,000 was made available originally to the Bayou LaFourche study and some work was started.

LOCAL INTEREST

About that time local interests indicated they desired to go ahead with the project themselves and therefore it appeared to be no longer necessary for us to continue the survey.

On November 25, 1952, a letter was addressed to Senator Ellender explaining the matter. I can read one paragraph if you like.

Senator ELLENDER. I do not recall it but what I was trying to demonstrate was here was a case where the local people were ready and willing to go ahead and as a matter of fact, prior to that it was expected the Government would do it but here you got your field work done, got your report made and you saved yourself, as it were, the money that you would have otherwise spent to complete that project.

Mr. BRENNAN. That money was used in the same general area on a report on streams and bayous in southern Louisiana.

Senator ELLENDER. The point I was trying to make, Mr. Chairman, was to have something, a little contingent fund, to cover such cases as this.

FLEXIBILITY IN ASSIGNMENT OF FUNDS

Senator KNOWLAND. That is what I was trying to develop here whether this amount which is set up in the revised budget is completely used by these 30 projects, or whether there is some flexibility for projects that might be deemed desirable.

General CHORPENING. In view of the language of the Budget Director placing the amount on a limited number of reports of recognized high priority those 30 reports are the ones, as we see it now, where we would place these funds.

Under the law the Chief of Engineers has flexibility in assigning these funds but of course we must be responsive to what we have been directed from the Director of the Budget in how we would apply them.

I believe, sir, it would be helpful if I went ahead and gave a few more statements in connection with this overall program.

FURTHER DISCUSSION OF REPORTS OUTSTANDING

As I said, as of April 24 we had 954 reports still outstanding, of which 70 at that time were back in the hands of the Congress, in the Public Works Committees awaiting whatever authorization bill may be passed; 27 were in the hands of the Budget Bureau. They have to be cleared through there.

There were 19 in the hands of the States and Federal agencies. We must clear these reports there.

There were 80 in our office and in the River and Harbor Board, and in the field, 758.

Now it is also, I think, of interest that in recent years with the limited funds available we have just about been able to keep even with the picture. We are not making any inroads on the backlog at all.

Resolutions come to us every year. So we are getting some completed it is true but they are coming in at about the same rate we are able to complete on the average.

Senator KNOWLAND. Will you furnish us with a table showing for the past 4 or 5 years the number of reports which have been requested of the engineers by Congress, and the number that you have been able to complete in that year so that we can see in a quick glance just what this survey situation really is.

General CHORPENING. Yes.

(The information referred to follows:)

Number of navigation and flood-control report authorizations ordered and processed by fiscal years [1]

Fiscal year	Ordered	Completed	Fiscal year	Ordered	Completed
1945	465	78	1952	111	83
1946	209	116	1953	[2] 100	[2] 120
1947	260	126	1954		[2] 21
1948	182	91			
1949	165	148	Average (1945-53)	200	104
1950	220	116	Average (1951-53)	102	88
1951	94	61			

[1] Figures are for report authorizations (Public Works Committee resolutions or items in Rivers and Harbors or Flood Control Acts). Figures apply to River and Harbor Board.
[2] Estimated.

PAYMENTS TO INTERIOR DEPARTMENT FOR STUDIES

Senator ELLENDER. General, to what extent do you use any of the funds that we appropriate for you to pass over, let us say, to Interior in making certain studies?

General CHORPENING. Of these funds we are now discussing, the $900,000, that item, none of that is turned over to Interior.

Senator ELLENDER. Last week, Mr. Chairman, before the Interior Committee we had some discussion as to surveys to be made in the White River Basin wherein Interior was making attempts to come into territory which I thought they had no business in. I do not know whether you are familiar with that or not but I made the point then that I thought there would be quite a bit of duplication if we permitted Interior to do it when it was really within your work. You were there, Senator Hayden, when we brought that up.

I am just wondering the extent to which moneys that are appropriated for account of the engineers are exchanged with moneys that are used by the Reclamation Service or vice versa?

General CHORPENING. None of these funds are for that purpose. These are to prosecute studies we have been given to prosecute by the Congress.

Of course, all our reports under the law and administrative agreement are sent to Agriculture, Interior, and other agencies for comment. That is required on all our reports.

ARKANSAS, WHITE, AND RED RIVER PROJECT

Senator HAYDEN. That was a special situation on the Arkansas, White, and Red Rivers and their tributaries where certainly on the upper reaches irrigation would have to be considered, and on the lower reaches it is a different matter.

What is the status of that investigation that was directed especially to Arkansas, White, and Red Rivers and their tributaries?

General CHORPENING. Later on under general investigations we will come to the item for the Arkansas, White, and Red River survey.

In that, the Department of the Interior is cooperating on those functions that are assigned to them, irrigation features. Similarly Agriculture is cooperating on the overall comprehensive study. The Corps of Engineers is the chairman agency as well as on the New York-New England study.

Senator ELLENDER. Who calls them in, the Corps of Engineers, to perform certain functions?

General CHORPENING. Under the law in the case of the Arkansas, Red, and White, it is set up so they will cooperate with us. The Corps of Engineers is the chairman agency.

Senator ELLENDER. On the lower reaches of the Red River, for instance, and the White, wherein the Department of the Interior has no jurisdiction—in other words, its functions do not cover those States under the law, they have got to get special authority to be able to spend money—why could not the Corps of Engineers do that work without calling on the Interior Department?

General CHORPENING. In the lower reaches, as I recall, down in Arkansas—and we should properly look into that—there are some irrigation possibilities, rice irrigation. We propose to hire some experts from the Bureau of Reclamation to do that work for us.

Senator ELLENDER, Paid for out of your funds?

General CHORPENING. Yes, sir. That is in territory that normally they do not operate in.

Senator ELLENDER. But this work would be carried on under your jurisdiction?

General CHORPENING. Yes, sir.

Senator ELLENDER. You tell them what to do?

General CHORPENING. Yes, sir.

Senator ELLENDER. And Interior will simply furnish you the technicians?

General CHORPENING. That was our proposal; yes, sir.

Senator ELLENDER. I did not understand it that way before the Interior subcommittee the other day. They were asking for authority to spend their own money in that area.

General CHORPENING. I believe that there has been a little contrary thinking perhaps and perhaps some efforts have been made to do that as a Department of Interior function. We believe we can do that with such advice as required.

Senator ELLENDER. That is what I thought, General. That was exactly my position and that is why I suggested then, it is in the record, that I did not think the Department of Interior should encroach on any of the prerogatives of the Corps of Engineers particularly in States wherein they had no authority.

General CHORPENING. Yes, sir.

STATUS OF SPECIAL STUDIES

Senator KNOWLAND. We might also get a statement of the status of the special studies you are making.

General CHORPENING. Yes, sir. You are speaking particularly of the Arkansas-Red-White and New England surveys?

Senator KNOWLAND. Yes, sir.

General CHORPENING. Before we leave the general survey matter, I would like to say this: I am sure perhaps you appreciate that of all the reports that the Corps of Engineers has made in the last 23 or 24 years, over half of them have been unfavorable. That is something that is not often appreciated, that over half of them have been unfavorable.

Now we are making every effort, as we go into these studies, and I believe we can perhaps improve, to determine very early in some studies that there just is not a favorable project and therefore there is no point in going ahead with further funds.

On some, however, which are quite complicated, they may work out unfavorably in the end but you must go on through and make a very thorough study to finally determine the situation. I am certain that it is well understood that in nearly all of these there is great local interest and desire to have a favorable report.

Senator KNOWLAND. Of course you can very well have a project which is of tremendous economic value to the area and which, if there were adequate funds available, would be amply justified but under the criteria of applying the funds to surveys of recognized high priority—that furnishes a line at some point beyond which no matter how economically helpful it would be to the community, they could not fit into that particular criterion.

Senator ELLENDER. Off the record.

(Discussion off the record.)

General CHORPENING. I would like to say that in the past few years we have been able to complete about 100 reports annually but in fiscal year 1954, as I stated, we will be able to work on only about 30 reports. That is about 3 percent of those outstanding at this time.

AVERAGE EXPENDITURE ON PLANNING PROJECTS

Senator DWORSHAK. What is the average expenditure for one of these planning projects?

GENERAL CHORPENING. They vary from a small amount, a preliminary examination of a small project, to many hundreds of thousands or even it may run higher than that; if it is a very complicated

river basin that we are reviewing, it can run into a considerable amount.

I can say that of those now on the books, the estimated cost I think of all of them was in the neighborhood of $40 million, of which about $20 million has been appropriated, and to complete the program now in front of us as given to us by the Congress would take in the neighborhood of $20 million.

Senator KNOWLAND. You might also furnish for the record in view of the testimony before the committee a statement on the investigation at Rockland, Maine, which Senator Smith brought up the other day, and also the study of Great Lakes connecting channels.

General CHORPENING. Yes, sir.

Senator KNOWLAND. You may furnish that information for the record.

(The information referred to follows:)

INVESTIGATION OF ROCKLAND HARBOR, MAINE

An investigation of Rockland Harbor, Maine, was authorized by resolution of the Committee on Public Works, House of Representatives, adopted April 25, 1951. No work has been accomplished on this study, which is of preliminary examination scope, because of lack of funds for the survey-report program.

The present approved budget estimate for fiscal year 1954 includes only enough funds for the general survey-report program to carry on work in a few areas. The amount in the approved budget estimate will not permit work on the Rockland Harbor investigation.

A report of preliminary examination scope is estimated to cost $2,500 and for one of survey scope is $7,500.

SPECIAL STUDIES—SURVEY OF WATER LEVELS OF THE GREAT LAKES

This investigation was authorized by a resolution of the Committee of Public Works of the House of Representatives and was initiated in the fiscal year 1952. It will cover a study of the damage caused by increased lake levels to shore property which has been severely attacked during the last few years by wave action. The present high lake levels are the primary cause of the damages. This study will include consideration of possible control of the lake levels as well as consideration of protection by levees and dikes of the areas presently subject to damage.

The first interim report has been submitted and recommends protection by means of levees and dikes for three areas. Other reports on local protection projects will be submitted in the future, as well as the comprehensive report on the overall study including possible control measures.

The total estimated cost of the study is slightly over $1 million of which $200,000 has been made available through this fiscal year. The amount in the approved budget estimate for the fiscal year 1954 of $50,000 will leave a cost to complete of about $766,000 in subsequent fiscal years.

General CHORPENING. I think perhaps, sir, the justification sheets here probably state it in sufficient detail.

Senator KNOWLAND. I think we will have those placed in the record then at this time so they will be available.

(The justification sheets referred to follow:)

JUSTIFICATION OF ESTIMATE

1. EXAMINATIONS AND SURVEYS

(a) *Navigation studies*

The amount required for the fiscal year 1954 will permit completion or continuation of work on only a few of the most critical and important reports on navigation now outstanding. During fiscal year 1952, no appropriations were made for this program, which had been curtailed during fiscal year 1951 in accordance with Presidential directives on cessation or slowing down of civil-works activities not

essential to the national defense or related efforts. Only limited carryover funds were thus available in fiscal year 1952 for continuing and completing insofar as possible essential reports on navigation improvements important to defense transportation, and major industrial activities, commercial fishing, and other purposes affecting the emergency situation and the national economy. Appropriations in fiscal year 1953 applicable to the general rivers-and-harbors survey program were only about 80 percent of the approved budget estimate for that year, and consequently, it has been impossible to resume even the budget approved minimum rate of progress on these general investigations. Funds available in fiscal year 1953 have been applied to continuing and completing, where possible, those reports already in progress, and starting some new reports assigned by congressional committee resolution which have important relations to the defense effort or to essential civilian economic activities.

(*b*) *Flood-control studies*

The amount required for the fiscal year 1954 will permit continuation or completion of work on only a few of the most critical and urgent reports now outstanding. During fiscal year 1952, no appropriations were made for this program, which had been curtailed during fiscal year 1951 in accordance with Presidential directives on cessation or slowing down of civil-works activities not essential to the national defense or related efforts. Only limited carryover funds were thus available in fiscal year 1952 for continuing and completing insofar as possible essential reports for power development, flood protection of major industrial and agricultural areas, and for other purposes affecting the emergency situation and the national economy. Appropriations in fiscal year 1953 applicable to the general flood-control survey program were only about 70 percent of the approved budget estimate for that year; and, consequently, it has been impossible to achieve even the budget approved minimum rate of progress on these general investigations. Funds available in fiscal year 1953 have been applied to continuing and completing, where possible, those reports already in progress, and starting some new reports assigned by congressional committee resolutions, which have important relations to the defense effort or to essential civilian economic activities.

(*c*) *Beach erosion studies.*

The amount of $125,000 is required in fiscal year 1954 for general beach-erosion studies. Under existing law, the Beach Erosion Board has the responsibility of making general studies with a view to preventing erosion of shores and determining the most practicable means for the protection, restoration, and development of beaches. The general investigations and studies are made for the purpose of developing or determining the hydraulic and physical phenomena, techniques, principles, and procedures related to the protection, restoration, and development of shores and beaches. Data and information developed from these studies are applied to solving specific problems of erosion. The sum of $125,000 is included for the general studies during 1954 and is considered to be the amount necessary for a minimum rate of progress in the development of knowledge required for the selection of effective measures of beach-erosion control. The Beach Erosion Board also engages in the study of specific problems of beach erosion and shore protection and submits reports thereon including plans for corrective measures and recommendations as to Federal participation in the cost of such corrective measures.

(*d*) *Special studies*

(1) *Arkansas, White, and Red River Basins survey.*—The Flood Control Act of 1950 authorized the Corps of Engineers, through the Secretary of the Army, to make a survey of the Arkansas, White, and Red River Basins, in coordination with the Departments of the Interior and Agriculture, the Federal Power Commission, and other Federal and State agencies, with a view to developing comprehensive, integrated plans of improvement for navigation, flood control, and related land and water uses. The Corps of Engineers acts as chairman of the study commission set up to make the study. The presently scheduled date of completion of this comprehensive study is June 1955.

An amount of $515,000 is required for the fiscal year 1954 to permit adequate progress by the Corps of Engineers toward meeting the scheduled completion date of the report and for maintaining coordinated progress with the other Federal agencies. In view of the limited appropriations made available for this study during fiscal years 1952 and 1953, the report has been progressing at a reduced rate. It is essential that the appropriation be made available to permit scheduled completion of a coordinated overall plan of water resource development to meet

the needs of the area. The Arkansas, White, and Red River Basins are an important segment of the Southwest, and the progress and development thereof, particularly in the present crucial period of national history, are vitally linked with proper development of the water resources of the region. Much future Federal, non-Federal public, and private development in the region will be dependent upon the findings of the authorized study.

(2) *New England and New York survey.*—The Flood Control Act of 1950 authorized the Corps of Engineers, under the Secretary of the Army, to make a comprehensive study of the Merrimack and Connecticut Rivers and other streams in New England to determine the practicable hydroelectric potentialities in combination with other water and resource developments of the area. The President's directive of October 9, 1950, to the Secretary of the Army included the New York area, and the resolution of October 27, 1950, by the Federal Interagency River Basin Committee formed an interagency committee, with the Department of Army as chairman, to make the investigation. Other agencies represented are the Departments of Agriculture, Commerce, and Interior, the Federal Power Commission, the Federal Security Agency, and the governors of the seven participating States. The report is scheduled for completion by June 30, 1955. An amount of $710,000 is required for the fiscal year 1954 to permit adequate progress by the Corps of Engineers toward meeting the scheduled completion date of the report and for maintaining coordinated progress with the other Federal agencies. In view of the limited appropriations made available for this study during fiscal years 1952 and 1953, the investigation has been progressing at a reduced rate. It is essential that the appropriation be made available to permit completion of the comprehensive study as scheduled in view of the increasing needs of the area for a coordinate overall plan of the water resource development and the influence of such a plan on further economic and industrial progress in the region.

(3) *San Francisco Bay, Calif.*—The Flood Control Act of 1950 authorized the Corps of Engineers, through the Secretary of the Army, to make a preliminary examination and survey of the San Francisco Bay, including San Pablo Bay Suisun Bay, and other adjacent bays, and tributaries thereto, California. The study will have the objective of determining the advisability of the further improvement of the San Francisco Bay area. The needs of the San Francisco Bay area for additional transportation arteries, bridges, causeways, and other facilities designed to advance the commerce, navigation, national defense, land reclamation, and residential and industrial developmnet of the area, will be investigated during the course of the study. The survey will be duly coordinated with the several Federal and local agencies concerned.

The amount of $100,000 for the fiscal year 1954 will permit partial accomplishment of the study.

(4) *Survey of water levels of Great Lakes.*—The Committee on Public Works of the House of Representatives authorized a review of reports relating to the water levels of the Great Lakes with a veiw to determining the property damage resulting from changes in levels of the Great Lakes and the feasibility of measures to prevent the recurrence of damages. High-water levels of the Great Lakes aggravated by wind and wave action and by temporary local rises result in overflow of low areas in many locations along the United States shores of the Great Lakes. Many of these low-lying areas have been developed into residential communities. Many of the areas were developed during periods when lake stages were on the low side of their fluctuation range. The authorized survey will consider possible measures to reduce high stages and the advisability of adopting local flood and beach-protection projects for areas along the shores of the Great Lakes and tributary streams that are subject to inundation as a result of fluctuations in the levels of the lakes. This investigation will be coordinated with the affected States and other Federal agencies to the maximum extent practicable.

The amount of $50,000 for the fiscal year 1954 will permit partial accomplishment of the survey.

2. COLLECTION AND STUDY OF BASIC DATA

(*a*) *Stream gaging* (*Geological Survey*)

In the planning, design, and operation of projects for flood control, navigation, hydroelectric power development, and other water uses, continuous records of stream-flow measurements over a long period of years are of prime importance. These stream-flow records provide a measure of the water resources available for useful purposes, and the magnitude of floods to be controlled, during the periods of

observation. The records also offer a means of extrapolating additional information when studied in conjunction with storms producing the observed run-off.

The value of these stream-discharge records is largely dependent upon uninterrupted station operation over a long period of years in which a maximum range of discharge from minimum to maximum rates may be observed.

The United States Geological Survey, under its normal functions, has maintained a primary network of stream-gaging stations that was planned to meet the general need of the public insofar as available funds permitted. Inasmuch as this basic network of stream-gaging stations was not sufficiently dense in all regions to provide suitable records of stream-flow for use in the planning, design, and operation of specific river improvement projects for which the Department of the Army is responsible, funds have been transferred to the Geological Survey in recent years to cover in part the cost of installing and operating specific stream-gaging stations necessary for such purposes. To continue the operation of these stations that are of special importance to the Corps of Engineers in connection with its projects, a total of $1,206,000 would be required by the Geological Survey during fiscal year 1954 exclusive of funds received from other cooperative sources. This total amount includes funds to be transferred by the Department of the Army to the Geological Survey as well as funds appropriated directly to the Survey expressly for use in the operation of stream-gaging stations required by the Corps of Engineers.

Of the total of $1,206,000 the amount of $272,000 is being included in the budget estimates for fiscal year 1954 submitted by the Geological Survey for expenditure on the stream-gaging program required by the Department of the Army. The amount of $452,000 is needed for transfer to the Geological Survey. In addition to the above amounts, the amount of $482,000 will also be transferred to the Geological Survey from funds budgeted elsewhere for authorized projects.

(*b*) *Precipitation studies (Weather Bureau)*

The hydrologic network of precipitation stations operated by the United States Weather Bureau was established to supplement the network of meteorological stations with additional precipitation stations, particularly of the continuous recording type, so as to provide the Corps of Engineers with a density of stations and type of record which would be adequate for present and future development of water resources. While required and fully justified for flood control activities, the program is also partially satisfying a long existent deficiency in recording precipitation data. These data, for which there is no substitute, are used by all Federal, State, and other agencies and individuals dealing with water resources. As with all hydrologic data, the value of the records is largely dependent upon uninterrupted station operation.

Hydrometeorological studies required by the Corps of Engineers are made by the Weather Bureau. This activity includes review of meteorological aspects of the storm study program utilized by the Corps of Engineers in the planning, design, and operation of water control structures. In addition the Weather Bureau has developed the new and unique science of estimating maximum possible precipitation in order to provide the basic meteorologic data needed to insure the adequacy of large structures whose failure would result in disastrous loss of life and property.

The amount of $275,000 is needed during fiscal year 1954 for transfer to the Weather Bureau in order to continue these programs. In addition to this amount, an amount of $320,000 will be transferred to the Weather Bureau from funds budgeted elsewhere for authorized projects.

(*c*) *Fish and Wildlife studies*

In accordance with the provisions of Public Law 732, 79th Congress, approved August 14, 1946, the United States Fish and Wildlife Service investigates the effect of water resources development projects upon wildlife and submits reports thereon with recommendation of means and measures to prevent loss of or damage to wildlife resources.

The sum of $55,000 has been included for transfer to the Fish and Wildlife Service for investigation of projects of the Corps of Engineers during fiscal year 1954.

(*d*) *Miscellaneous studies*

The studies carried under this activity are discussed in the following paragraphs.

An investigation of major storms is conducted by the Corps of Engineers for the purpose of accumulating comprehensive data for the most important past and current storms. Basic precipitation data from all sources are compiled and

analyzed to determine critical depth-area-duration relationships for the storms as they actually occurred. These data are necessary to the proper planning, design, and operation of water-control structures.

General hydrologic studies are essential to the development of criteria on which to base the design and operation of flood-control projects. The criteria derived from these studies are required in determining economic justifications, capacity of flood-control works, required provisions for security against failure of the project during extreme flood emergencies, proper design for optimum performance, economy of construction, and proper operating procedures after completion of construction. The studies would include the relations between rainfall and resulting runoff, snow studies, flood forecasting, analyses of past floods, infiltration indexes, unit hydrographs, development of flood hydrographs, and other studies of related hydrologic nature.

Flood investigations include the collection of current-flood data pertaining to serious floods on streams for which formal reports have not been specifically directed by the Congress. The data collected consist of precipitation data, flood damage data, record of flood discharges and heights, and similar data of hydrologic nature. It is imperative that these data be collected during and immedistely following the occurrence of a serious flood. Extensive use is made of the information in connection with hydrologic features of all reports prepared in subsequent years.

Reservoir regulation studies are required by sections 9 and 7 of the 1944 Flood Control Act to determine capacities for flood-control and navigation purposes in reservoirs planned by other agencies and to develop and prescribe regulations for flood control and navigation use of storage so allocated.

Flood emergency manuals are currently maintained to provide an overall guide for operations during flood emergencies so as to eliminate confusion and to assure efficient use of available facilities.

Sedimentation studies such as the collection of suspended and bed load data, data on degradation, aggradation, and delta formations, investigations of sediment transportation characteristics of natural streams and laboratory studies, are necessary to provide general knowledge and background data on which to base the planning, design, and operation of water-control structures.

In addition to the cooperative items (2a and 2b) above, the Corps of Engineers independently operates certain stream-gaging and rainfall stations that are not included in the programs carried on in cooperation with the Geological Survey and the Weather Bureau. These noncooperative general-coverage stations, which are not assignable to any specific project or report, are usually required in connection with some special study or purpose. Due to the special nature of the stations and the fact that they are operated for a limited time only, their inclusion in the cooperative programs is impracticable.

Funds in the amount of $218,000 are required to carry on minimum essential studies in connection with the above.

General CHORPENING. I would like to point out in connection with those two surveys our date of completion for those, was formerly June 30, 1954.

With the amounts now included in the budget, the date—and that is in our letter from the Director of the Budget—for completion is set back to June 30, 1955.

NEW YORK-NEW ENGLAND SURVEY

I would also like to mention in connection with the New York-New England survey that about 2 weeks or so ago a letter was sent by the Secretary of the Army to this committee and the House Appropriations Committee asking for authority to transfer $250,000 on a loan out of current expense money for going ahead with fieldwork at this time which would be more economical to pursue than later in the year.

Now we have received House action on that. They have advised that they would allow us $200,000. Time is getting late and I would appreciate it if we could be advised fairly soon whether the action will be favorable or unfavorable on it.

Senator HAYDEN. What is the need for the work? What is the nature of it?

General CHORPENING. Both of these comprehensive studies, Senator, are for the purpose of making a thorough and complete inventory of the potentialities of the water resources of those regions.

Senator HAYDEN. Is there a particular phase of that you want to do this summer?

General CHORPENING. In New England particularly our field season is shorter than it is down in the other area. We want to get under way now with some field work. If we do not start until later, it will probably push us over into next year and we would like to get it started now.

We are all ready with our own forces and also to make some contracts for some borings, and so on. We would like to proceed now and we do not have the funds available.

SAN FRANCISCO BAY STUDY

The next one here is the San Francisco Bay study. We are asking for $100,000 to go ahead with the survey. You describe that, Mr. Beard.

Mr. BEARD. For a number of years past there has been a great deal of interest in California and particularly in the San Francisco Bay region developing the estuary of the San Joaquin and Sacramento Rivers for navigation, water supply, and additional bridge crossings of the bay and even talk of diking off part of San Francisco Bay to make it into a fresh-water lake which could then be used as a supply of fresh water for the communities around the San Francisco area. There have been various plans talked about but none of them were completed. In other words, they did not go far enough to indicate their feasibility.

Finally, 3 years ago, in the Flood Control Act of 1950, the Congress directed us to make an investigation of this whole matter of navigation and related activities in the San Francisco Bay area.

It was understood at that time by the Congress that it was to be a very comprehensive study.

Now we have carried the work far enough so that the preliminary examination report is essentially completed out in the San Francisco District and Division Offices. That will be coming in very soon. Anticipating a favorable recommendation for an extensive survey, we have budgeted $100,000 to carry on the work in 1954.

There would have to be a lot of very careful and detailed engineering work done both in the matter of hydraulics and also in the matter of water supply and underground-foundation conditions and so on; probably if the study goes through to a detailed survey, a hydraulic model would have to be set up to study the actual currents and the way in which various structures would affect the currents and that sort of thing.

There has been a very live interest out in the bay area in getting, we will say, an impartial engineering study made of these various proposals in the light of interests that have come into the particular picture proposing one scheme or another.

FURTHER DISCUSSION OF ARKANSAS, WHITE, AND RED RIVER SURVEY

Senator ELLENDER. May I ask a question, Mr. Chairman? I was asking about the Arkansas, White, and Red Rivers. I notice you have a survey of $515,000.

General CHORPENING. Yes, sir; that is to continue the comprehensive survey that is under way and you will recall I stated this will not permit its completion until June 30, 1955.

Senator ELLENDER. Is that the survey in which you expect to hire experts from the Interior?

General CHORPENING. That was our plan.

Senator ELLENDER. Your plan?

General CHORPENING. Yes, sir.

Senator ELLENDER. Interior, as I remember, is asking for $100,000 of its own to carry out its own under its own steam from what I understand. Do you know anything about that?

General CHORPENING. I have heard there was something like that. Now I do not know what the $100,000 item applies to. There are parts of this territory where they operate.

Senator ELLENDER. This was in Louisiana and Arkansas in which they have absolutely no authority. They have got to have special language, as I remember, written in the bill to be able to come down there and do this work. Under the law and under your past methods of procedure what you could do here is to use some of these funds by simply hiring specialists in reclamation if you needed them, who would work under your jurisdiction.

General CHORPENING. That was our proposal.

Senator ELLENDER. That is what I thought. As I remember, they were asking for this extra $100,000 so that they themselves could go down there and do the work on their own and more or less independently from the Corps of Engineers.

FUNCTION OF DEPARTMENT OF AGRICULTURE IN CONNECTION WITH SURVEY

Senator HAYDEN. I think it would be advantageous to both subcommittees and also to the Subcommittee on Agriculture because my recollection is that the Department of Agriculture is required to perform certain services in connection with this river basin survey.

General CHORPENING. Yes, sir.

Senator HAYDEN. And that there is an item in the agriculture bill.

Senator KNOWLAND. That is right.

AGENCY PLAN OF COOPERATION

Senator HAYDEN. I think it would be a good thing if all the agencies would get together and submit to the several subcommittees just what their plan of cooperation is and then we would understand if the Department of Agriculture has to have some money to perform a function, exclusively its own, we will put it in the agriculture bill, if the Bureau of Reclamation has to have some money to perform a function it properly may under the law it may have the money, and then you should have yours.

Senator KNOWLAND. In view of the Engineers being the chairman agency if they could get together on the situation and submit it for

all three subcommittees so we can find out: (1) Whether the proper charges as between the agencies are being made and second, what duplication there may be in the several agencies in the work for which they are requesting funds.

Senator ELLENDER. As I pointed out on Interior, Senator Hayden was there part of the time when I brought the question up—where the Interior had absolutely no authority there except that they work with the engineers. Here we have a case where we are being asked to appropriate $515,000 and out of that $515,000 he states he can hire specialists for reclamation purposes and there is no need for Interior to come in as such.

They could come under you and be paid out of the funds we are now appropriating. That is the piont I was trying to make. If you give them the $100,000 they are going to probably do more work than is contemplated and more work that is needed to carry this out.

Senator KNOWLAND. And furthermore we will be overappropriating for this by at last $100,000 here for the work which presumably this justification is being based on.

Senator ELLENDER. It strikes me where Engineers are taking the lead they should get experts if they need it instead of letting those departments come under their own steam and tell them what to do.

Senator KNOWLAND. We should have a report on that.

General CHORPENING. In that connection we, as the chairman agency, work with the other agencies in planning what we are going to do in the next year. Then each agency submits to the Bureau of the Budget what they estimate they require and the coordination is done in the Bureau of the Budget. So we at this level are brought in informally if at all, in that coordinating at the Bureau of the Budget level.

Of course we will furnish whatever the committee desires.

COMMITTEE DIRECTIVES

Senator HAYDEN. I think it will be perfectly proper for this committee to give you a directive that we want to inow just how this whole matter is to be performed, how much of it is to be done by the Department of Agriculture as a function which they should properly perform under the law to determine certain agricultural resources.

There are certain functions the reclamation service should perform under the law, and your functions—but we want to know there is no duplication and no invasion of territory as was pointed out by Senator Ellender.

If those things are properly done, there will be no invasion of territory duplication. I do not know but that, if you had your own way, you would like to have more than $500,000 on this job; would you not?

General CHORPENING. We had originally proposed to complete the report by June 30 1954; so we would have required more funds, but it was concluded by the Bureau of the Budget that this study should be extended another year and the funds were reduced.

Senator HAYDEN. But, as the coordinating agency, you can consult with these folks and come in here and put in this record what it is and we can have it so. There is no misunderstanding.

General CHORPENING. With this exception, sir. The coordination between Agriculture and Interior and our program is done at the Bureau of the Budget level, and I really think that that is where the statement should come from on the amounts set up under the various agencies to prosecute this study.

Senator HAYDEN. All right. We can handle it this way. We can ask you to say to the Bureau of the Budget we would like to have this information, and get it so that it comes from all the agencies with their O. K. The committee wants facts.

General CHORPENING. Yes, sir.

Senator HAYDEN. If you do not want to do it that way, the chairman of this committee would not have any hesitancy in asking the Budget to do it.

Senator ELLENDER. In the case to which I have referred, the Bureau of Reclamation would have to have special authority under the act to be given permission to do this work, whereas you state you can do it yourself by hiring them to work under you.

Why should they, under their own steam, come into that picture? I can't understand except it is more or less a broadening of their power.

LETTER TO THE BUREAU OF THE BUDGET

Senator KNOWLAND. Let's cut the redtape and lick the problem this way. The Chair herewith instructs the clerk of this committee to prepare as strong a letter as is necessary for the Chair to sign, directed and addressed to the Director of the Budget, calling his attention to what we want forthwith for our hearings, with a copy to the Army Engineers, the Department of the Interior, and the Department of Agriculture.

Senator HAYDEN. Are there any other agencies in there?

General CHORPENING. The Federal Security Agency is in it to a limited amount, the Federal Power Commission to a limited amount, and the Department of Commerce.

Senator HAYDEN. Those appropriations are scattered through a series of bills, and we should know all about them at one time.

Senator KNOWLAND. Do that and tell him it is a priority matter this committee wants before we get into the stage of marking up the bill.

You may proceed. You might also get us similar information on the New England-New York study if you get into the same type of situation on that investigation.

Senator HAYDEN. We should write a letter like that to the Bureau of the Budget and get the same kind of information on that investigation.

BEACH-EROSION STUDIES

Senator ELLENDER. On "Beach-erosion studies, $125,000," these studies are made primarily for the purpose of obtaining information that may be used in other sections of the country.

General CHORPENING. That is correct.

Senator ELLENDER. Is there any money at all spent by the Federal Government to help do the actual work of protecting beaches?

General CHORPENING. A beach-erosion project may provide that the Federal Government will pay up to one-third of the cost for protection of public beaches, not private beaches, but publicly owned ones.

Senator ELLENDER. How about where the saving of the beach will save public property such as roads and things like that that have been established along a beach? Wouldn't it be used for that purpose, too?

General CHORPENING. That is correct. The law states exactly what we can do. The principal thing is that the Federal Government contributes not more than one-third.

BENEFITS TO PUBLIC PROPERTY

Senator ELLENDER. Let me ask you this: Suppose you make a study of a beach, and it turns out that the work will inure to the benefit of the people who own next to the beach. In other words, it will serve first to protect public property there that may be washed in, and under a State law it may be that if property is recovered by virtue of building these little groins that the recovered property may be the property of the adjacent owner, what then? Would you be permitted to participate in such a project as that, or would you require that any recovered property remain public property, or become public property?

If you cannot answer that, I wish you would look into it and put it in the record at this point, because I have several projects I am familiar with, not only in my State but other parts, about which I have been asked.

General CHORPENING. As long as we are basically protecting public lands, if some other additional advantages are done to private property on the side, that is all to the good.

Senator KNOWLAND. Of course, the reverse side of that coin is there are cases where jetties or groins have been built and where apparently it has affected the currents and so forth to the point where it has actually eaten out some of the beach areas and caused as much damage as you get on the Mississippi when you get a flood because of the change in the whole historical situation as far as these beach areas are concerned.

We have had several of those in California where it has created some very serious damage.

Senator ELLENDER. The survey would probably show where that would occur.

General CHORPENING. We try to anticipate that. The action of ocean currents is one of the very difficult things to accurately predict, and these studies we are making are looking forward to getting better information so we can accurately predict what will happen when we build groins and breakwaters.

Senator KNOWLAND. You may proceed.

FUNDS FOR GENERAL STUDIES

General CHORPENING. I would like to add this so there will be no misunderstanding. There are no funds in this budget being presented to carry out cooperative studies. These are all general studies that are in here.

Senator HAYDEN. Did you ask for any money for that purpose?

General CHORPENING. Yes, sir.

Senator HAYDEN. How much?

General CHORPENING. About $55,000, sir.

Senator HAYDEN. Have you usually had that money for that purpose? In past years?

General CHORPENING. Yes, sir. Last year there was none requested in the budget. The Congress added $75,000 for that purpose.

Senator HAYDEN. I had recollection that in the absence of a budget request we put in some money anyhow.

General CHORPENING. Yes, sir, you did.

Senator HAYDEN. I think, Mr. Chairman, it would be more worthwhile to look back, since the war, for the last few years and see how much money has been made available by Congress for that purpose each year, because cooperative studies are important.

Senator KNOWLAND. If that information has not already been supplied to the committee, will you see that it is provided?

(The information referred to follows:)

Funds were not specifically appropriated for cooperative beach erosion studies prior to the fiscal year 1950. From the fiscal year 1946 through 1949, allotments for cooperative beach erosion studies were made from the general appropriation for examinations, surveys, and contingencies, rivers and harbors, as indicated below:

Fiscal year:	*Allotment*	Fiscal year:	*Allotment*
1946	$36, 355	1948	$133, 970
1947	75, 400	1949	68, 300

Since fiscal year 1949, the following specific appropriations have been made for cooperative beach erosion studies:

Fiscal year:	*Appropriation*	Fiscal year:	*Appropriation*
1950	$150, 000	1952	0
1951	0	1953	$75, 000

FURTHER DISCUSSION OF BEACH EROSION STUDY

Senator ELLENDER. Reverting to beach erosion funds, is there any place in this budget where you are providing funds to furnish a third in the event surveys are made from the money provided here?

General CHORPENING. No, sir.

Senator ELLENDER. And this is merely for surveys?

General CHORPENING. Yes, sir. This is for general beach erosion investigations but not for cooperative beach erosion studies.

MOUNTAIN SHEEP DAM

Senator DWORSHAK. General, have you completed your planning on the Mountain Sheep Dam?

General CHORPENING. The Mountain Sheep Dam is not authorized.

Senator DWORSHAK. It is not authorized?

General CHORPENING. No, sir.

Senator DWORSHAK. Is the work on Nez Perce Dam authorized?

General CHORPENING. No, sir.

Senator DWORSHAK. Both are in the same category as Hells Canyon, in not having been authorized for construction?

General CHORPENING. Neither one is authorized for construction.

Senator DWORSHAK. Aren't there any of those large projects on the Snake River authorized?

General CHORPENING. Not in that part of the Snake River. There are four authorized below Lewiston. The Senator recalls Ice Harbor, Little Goose, Lower Monumental, and Lower Granite.

Senator DWORSHAK. They are below Lewiston?

General CHORPENING. Yes, sir.

ICE HARBOR PROJECT

Senator DWORSHAK. You are asking for money to complete the Ice Harbor project?

General CHORPENING. No, sir. The money included in the budget is to continue, but not complete the planning.

Senator DWORSHAK. What will be necessary for the Corps to complete its preauthorization work on dams like Mountain Sheep and Nez Perce?

General CHORPENING. That gets back into the general survey funds again.

Senator DWORSHAK. You are not planning anything on those projects?

General CHORPENING. I do not believe we proposed to put anything on those this year.

Senator DWORSHAK. Have you completed any of the work to the extent that you have enough information and data available upon which to base potential authorization?

Mr. BEARD. No, sir. As of right now, Senator, we do not have any authorized study in progress in the field on that portion of the Snake River.

Our 308 review report submitted about 4 years ago included some consideration of that and we have a review resolution covering Mountain Sheep Dam on which we have completed the preliminary examination report but we have not had funds enough to carry that on into a detailed survey nor to investigate, for instance, the Clearwater River, or to look for alternate sites elsewhere on the Snake River.

FURTHER DISCUSSION OF MOUNTAIN SHEEP DAM PROJECT

Senator DWORSHAK. You have not completed the work to know whether Mountain Sheep or Nez Perce is now feasible?

General CHORPENING. We feel quite sure Mountain Sheep is a feasible project. Our preliminary survey indicated it was feasible and economically justifiable but not necessarily the most feasible and economical project.

Senator DWORSHAK. We read almost every day where the Secretary of the Interior or the President is making some reference to the famous Hells Canyon Dam but we see studies have not been completed on other comparable projects in that general area of the Snake River which may be even more desirable. How do we proceed to find out?

Mr. BEARD. We would need an authorization from the Public Works Committee or from the Congress, as a whole, directing such a study but in addition, we would need a sizable appropriation. We could not do any effective work trying to squeeze a study of that magnitude within the limited funds for general investigations included in our budget.

Senator DWORSHAK. You would have to have a specific fund. How much, for instance, to explore the possibility of the Mountain Sheep Dam?

Mr. BEARD. That would depend upon the extent of the investigation. It would take up to $400,000 just for the Mountain Sheep

site alone, but to consider the other projects that relate to it it would take a matter of a million dollars, Senator.

Senator DWORSHAK. It would appear that the Bureau of Reclamation has expedited its consideration of the Hells Canyon Dam which is under the supervision of that Bureau while the Army engineers have not been able to complete comparable studies of the other dams on the lower Snake—that is lower Snake above Lewiston—which may be even more desirable than the Hells Canyon Dam, is that correct?

General CHORPENING. Of course the four dams on the lower Snake are all authorized.

Senator DWORSHAK. I am not talking about them. I should have said middle Snake above Lewiston.

General CHORPENING. Of course a decision as to what is going to happen to Hells Canyon will affect what might be done in the other parts of the basin.

Senator DWORSHAK. But, General, how can you base action on the desirability for constructing Hells Canyon Dam when you have no data available on comparable dams that may be even more desirable but which happen to be under the supervision of the Army engineers? You can't make an intelligent decision, I do not mean you, but I mean the Congress, unless you have data available on at least three of those large dams instead of concentrating the effort on the Hells Dam merely because it has been under the supervision of the Bureau of Reclamation. That does not make sense, does it?

Senator KNOWLAND. While the general ponders that $64 question they have advised us the committee is meeting in the other room and this might be a good breaking-off point to give the general a chance to cogitate on the problem.

FUNDS FOR ENGINEERING DATA

Senator DWORSHAK. I would like to have a statement on that showing what actually is necessary to provide complete engineering data on Mountain Sheep and Nez Perce.

(The statement referred to follows:)

In order to provide complete engineering data on the Mountain Sheep and Nez Perce proposed projects, including hydrologic and hydraulic studies, foundation drilling, and other underground and geologic studies, structural designs, economic analyses, and other essential investigations; the Corps of Engineers would need about $500,000 and the investigation could be completed in about 2 years.

Senator KNOWLAND. We stand in recess until 2:30 Monday afternoon.

(At 11:15 a. m., Saturday, May 16, 1953, the subcommittee recessed to reconvene at 2:30 p. m. Monday, May 18, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS FOR 1954

MONDAY, MAY 18, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 2:30 p. m., pursuant to recess, in room F-39, the Capitol, Hon. William F. Knowland (chairman of the subcommittee) presiding.

Present: Senators Knowland, Cordon, Dworshak, Case, Russell, Ellender, and McClellan.

CIVIL FUNCTIONS

NEW ENGLAND-NEW YORK INTERAGENCY SURVEY

STATEMENT OF HON. JOHN F. KENNEDY, A UNITED STATES SENATOR FROM THE STATE OF MASSACHUSETTS

RESTORATION OF FUNDS REQUESTED

Senator KNOWLAND. The committee will come to order. Senator Kennedy, you may proceed. I understand you have a statement to make.

Senator KENNEDY. I appreciate very much the opportunity to speak before your committee in behalf of the restoration of funds for the New England-New York interagency survey, in particular those allocated to the Army Corps of Engineers. This survey is to enable the first comprehensive understanding of the potential development, utilization and conservation of the land and water resources of New England and New York. The subjects under study include agriculture, drainage, fish and wildlife, flood control, mineral resources, navigation, beach erosion, pollution control, power, public health insect control, recreation, and water supply.

I would like to summarize the arguments in my statement and have the statement placed in the record.

Senator KNOWLAND. The statement will be printed in full.

(The statement referred to follows.)

NEW ENGLAND-NEW YORK INTERAGENCY SURVEY

STATEMENT OF SENATOR JOHN F. KENNEDY

Mr. Chairman and members of the committee, I appreciate very much the opportunity to speak before your committee in behalf of the restoration of funds for the New England-New York interagency survey, in particular those allocated

to the Army Corps of Engineers. This survey is to enable the first comprehensive understanding of the potential development, utilization, and conservation of the land and water resources of New England and New York. The subjects under study include agriculture, drainage, fish and wildlife, flood control, mineral resources, navigation, beach erosion, pollution control, power, public health insect control, recreation and water supply.

The fullest utilization of our natural resources is an important step in the expansion of commercial and industrial activity in New England—an expansion that is sorely needed to offset problems resulting from industry dislocation and migration. For several reasons well known to this committee, proper utilization of our water resources necessarily and properly requires at least some participation by the Federal Government. Although the Federal Government has made tremendous expenditures for the development of the water resources of other areas of this country and indeed of other countries, its expenditures for such purposes in New England, whence a large share of the tax funds supporting such projects have come, have been almost nil. For example, of the 156 hydroelectric power developments in the United States, not a single one is located in any of the 6 New England States. Yet higher power costs and relatively small development of hydroelectric power are among the many factors causing the decline of the textile industry in New England and the lack of new industry.

We have many studies of New England's need for resource development. The purpose of the New England-New York interagency survey is to provide us with a comprehensive program to meet those needs. In the past, there have been a number of piecemeal studies of our New England river basins, but they have been limited to particular problems or particular rivers.

I think it would be ill advised for me or others to recommend any program for comprehensive resources development in New England until this intensive survey is completed. And I think it would be equally ill adivsed to deny to this survey the funds necessary for the full and prompt completion of its study. As you know, this committee consists of representatives of the Army Corps of Engineers, the Federal Power Commission, the Department of the Interior, the Department of Agriculture, the Department of Commerce, the Federal Security Agency, and each of the seven States involved. In addition, the cooperation and contributions of local agencies, civic organizations, and private individuals interested in resource development have been encouraged. The Committee was established by Presidential directive of October 9, 1950, and was based on provisions of section 205 of the Flood Control Act of that year. The single comprehensive report to be prepared of the coordinated findings of the Committee's various report groups and subcommittees is now scheduled to be submitted to the President at the end of the 1954 fiscal year—a lack of funds having postponed this completion date 2 years.

The 1954 budget now under consideration contains requests for funds for the completion of this study in the various department and agency budgets. The appropriation for fiscal 1954 to the Corps of Engineers for their work in the interagency survey, which was anticipated to be $1,200,000, has been reduced in the revised budget to $710,000. In comparison, the total amount in the printed 1954 budget for the entire survey (Army, Department of Commerce, Federal Security Agency, Federal Power Commission, Department of the Interior, and Department of Agriculture) of $1,762,309 has been reduced in the revised budget to $1,107,463. It is evident from these figures that most of the reduction has been made in the proposed appropriation for the Corps of Engineers, the agency carrying out a specific directive of Congress. The Assistant Chief of Engineers for Army Civil Works informed me this morning that this cut in funds will delay completion of the study still another year until 1955.

What sort of economy is it that refuses to permit a completion of a limited task and requires all personnel involved to keep on this job for an unnecessarily long time? A reduction in an appropriation of this type is not an economy, for although the annual appropriation will be reduced, the total cost of the job will in all likelihood be increased. This situation results from the fact that inadequate funds force delaying completion of the project without actually reducing the overhead. Key personnel, who have been assigned a specific job and will finish it if it takes 10 more years, are continued throughout the whole survey. If an adequate amount were made available promptly the whole survey could be rapidly completed and the results would be made available not only to the Federal agencies involved, but to the seven States that are vitally concerned with the sound development of their resources. This dragout procedure of the Federal Government forces the States also to delay and prevents them from effecting

economies which could be made through rapid completion of the study. I am convinced that such a study is not a luxury at a time when our mobilization economy requires the fullest utilization of our resources. It is not a matter which should be returned to State and local or private interests, if an effective and comprehensive study is to result.

In order to give the people of New England and New York at the earliest possible date the most comprehensive view possible of our resources and how they can serve us, Congress must provide the appropriations necessary for the prompt and adequate completion of the New England-New York interagency study.

Another important project is the Fall River Harbor project. Fall River is the only 1 of 5 major ports serving New England for which 35-foot project depths have been authorized in which the channel has not been completed. The port is one of the major petroleum receiving and distributing harbors in New England and is the terminus of oil pipelines serving central and eastern Massachusetts. The city is an important manufacturing center and its industries and those in the neighboring area are virtually essential to national defense and dependent for their continued operation on an adequate supply of fuel. A total amount of $325,000 is necessary to complete the three remaining elements and finish the authorized project. However, the sum asked for the current fiscal year is but $150,000 and will permit the completion of one specific phase only—the elimination of navigation hazards caused by the rock ledge at the bridges. While it would be desirable from the national standpoint to complete the Fall River Harbor development this year, it is also possible to lighten national expenditures slightly by deferring some of the work and undertaking only that which is vital at this time—which is that portion provided for by the appropriations amount requested in the revised budget, $150,000.

An important flood control project also involves two cities in the northwest corner of Massachusetts—Adams and North Adams—located on the Hoosic River. This area has suffered over $15,000,000 damage from various floods during the past two decades. This damage would have been prevented had the protective works planned by the Corps of Engineers and now authorized by the Congress been constructed at that time. Average annual benefits from the work are estimated at over $1 million a year. The revised budget includes $390,000 for the Adams project and $875,000 for the North Adams project.

ESTABLISHMENT OF AGENCY

Senator KENNEDY. The interagency survey was set up in 1950. It was supposed to come to completion in 1952, but because on several occasions sufficient funds were denied, it has been postponed and is now scheduled to come to completion in 1954. The proposed reduction from $1,200,000 to $710,000, in the revised Budget Bureau estimates, will mean that the survey target date will now be 1955 or 3 years later than was originally proposed.

We in New England, I think, have been far behind the rest of the country in developing our waterpower resources. Of 156 hydroelectric projects in the country, not one is in New England and our power costs are higher than in the country as a whole and are infinitely higher than particular sections of the country.

We, perhaps, do not have the potential waterpower resources you do in other areas; nevertheless, I do not think—and I think most of the people do not think—that we have used our resources as effectively as we might have. It is impossible for us to go ahead, however, and use our waterpower resources until this plan is finished.

If we postpone the survey's completion for another year, it will really not mean economy to the Nation. It will really mean just a stretchout. It will mean we will not be through until 1955 with the survey. Any real development of our waterpower resources, therefore, will be postponed to 1956, 1957, or later. In addition, the personnel will have to be kept on, and I really do not think that while it

might mean in fiscal 1954 a slight reduction, nevertheless, eventually the amount will have to be appropriated to complete the survey.

COMPLETION OF SURVEY REQUESTED

I therefore feel that in view of the tremendous amounts of money which have been expended to develop the power resources of the other sections of the country, that I would appreciate the committee considering our request to complete our survey in 1954.

Therefore, I respectfully ask the committee if they would consider putting back the original budget estimate of $1,200,000 instead of the proposed $710,000.

OTHER PROJECTS

That in effect is the substance of my testimony. There are three other projects which the committee is considering which I think will receive adequate appropriations under the new Bureau of the Budget recommendation. I refer to the Fall River Harbor project and the flood-control projects involving Adams and North Adams in the northwest corner of Massachusetts. If they are given the money provided in the new recommendations, I feel they will be adequately taken care of for this year.

I therefore wish to emphasize the importance of the interagency survey. I appreciate the chance to testify before the committee.

Senator KNOWLAND. We are glad to have you.

Senator KENNEDY. This is a matter of tremendous importance to us.

MISSOURI CIVIL-FUNCTIONS PROJECTS

STATEMENT OF HON. THOMAS C. HENNINGS, JR., A UNITED STATES SENATOR FROM THE STATE OF MISSOURI

GENERAL STATEMENT

Senator KNOWLAND. Senator Hennings, we are glad to have you before us.

Senator HENNINGS. Thank you.

Mr. Chairman and gentlemen, I am going to try not to impose upon your generosity and patience.

I appreciate the opportunity to say a few words before this committee on several of the civil-functions projects which are of utmost concern to the people of my State. Before discussing those projects, however, I think it would be entirely fitting and proper for me to say that the people of Missouri have reason to be grateful to this committee for the sympathetic consideration which we have always received here. Your committee has consistently displayed an understanding of the terrible flood problems confronting our State which has been most encouraging to the communities all along the river and to the individuals who have suffered so greatly in the recurrent floods in the Missouri Basin.

I know from my mail that thousands of people in our Missouri River Basin deeply appreciate the courtesy, the fairness, which this committee has always shown in their problems.

The recurrent floods which have brought such losses to the Missouri Basin are not new. Indeed, the whole water problem of the basin—

the problem of too little water in some areas, and too much in others—is one which we have grappled with over a long period of time. So far we have failed to come up with a program which realistically meets the overall situation in the valley, and which takes into account all the factors, not only floods and drought but a sensible and practicable approach to the full utilization of land and water resources in that vast area which comprises one-sixth of the land area of our Nation.

MISSOURI BASIN SURVEY COMMISSION

All during 1952 the Missouri Basin Survey Commission, of which I had the honor to serve as vice chairman, held public hearings up and down the river so that all individuals and public and private bodies could have an opportunity to present their views on this long-unsolved problem. We collected many thousands of pages of testimony, and in February of this year submitted the comprehensive report containing our recommendations to the President. We asked the President to examine carefully our findings and recommendations, and I am preparing legislation to implement the majority proposals.

It is perfectly obvious, however, that any broad and comprehensive plan aimed at solving the water problems of the Missouri Basin cannot be enacted overnight, nor put into effect quickly. It is apparent, therefore, that we must, in the interim, continue to deal effectively with the flood problems that now exist and approve realistic appropriations for carrying forth the work already authorized or underway.

Progress on many of the projects important to our State has been retarded because of the necessity to fit appropriations into a budget geared around requirements of national defense. Under the criteria set up following the outbreak of Korean hostilities, all of the projects were reexamined and only those deemed most urgent or considered vital to the national defense were to be included in the budget.

I believe those criteria are sound and justified. I believe also that we must think constructively of reducing our Federal budget, but that in so doing we must not sacrifice the flexibility needed to meet emergency situations to the rigid goal of economy for economy's sake. In this connection I feel that any arbitrary action to eliminate or curtail projects which have been declared vital to our defense or which are already under way would inevitably mean financial loss to the Government and are therefore of questional economic soundness.

TUTTLE CREEK

By way of a very brief review, let me point out that in the summer of 1951 the Kansas-Missouri area was hit by one of the worst floods our country has ever known. Estimates compiled since that time place the amount of damages at $1 billion of which approximately one-half billion was in the Kansas City area. Friday, July 13, 1951, has ever since been referred to in Kansas City as "Black Friday."

In that year, excessive rainfall over the area of the Blue River in Kansas poured a tremendous volume of water into the Kansas River from Manhattan to the mouth, and particularly into the Kansas City area. During that flood, the discharge from the Big Blue River was 102,000 cubic feet per second, and that discharge contributed 75,000 cubic feet per second to the crest stage of the Missouri River at Kansas City.

The peak discharge at Kansas City was approximately 510,000 cubic feet per second. The Tuttle Creek Reservoir controls 9,556 square miles of the 60,060-square-mile drainage area of the Kansas River above Kansas City, and it has been estimated that had the reservoir been in operation, the flood crest at Kansas City would have been reduced by at least 2½ feet.

It should be pointed out that the excessive rainfall which was primarily responsible for so much damage in 1951 is not an unusual occurrence in that particular area. It results from a meeting of cold and warm fronts over the section; and in the case of the 1951 flood, not only were these 2 pressures so strong that when they converged over the area they formed a stationary front which remained for days pouring down rainfall, but this was coupled with the fact that an extremely heavy rainfall all during the spring had left the ground completely saturated as well as filling up all the small ponds and overflowing banks of the streams feeding into the Big Blue and the Kansas River.

As a matter of fact, rainfall in this area frequently reaches an intensity of 6 to 8 inches in a 24-hour period, and 15 to 18 inches in a period of 3 to 4 days.

FLOOD-CONTROL PROJECT

Consequently, a reservoir designed with consideration only for flood control, as is Tuttle Creek Reservoir, seems to be the only practicable solution from the standpoint of flood-control problems in that vicinity. No power or irrigation functions are allied with the Tuttle Creek project.

In other words, its entire capacity can be utilized exclusively for flood control and there seems no question that in conjunction with and in coordination with other authorized projects in the Kansas River Basin and with soil conservation and upstream water retardation program, it would effectively alleviate the flood damages which occur so frequently in the Kansas and Missouri River Basins.

INADEQUACY OF PRIOR APPROPRIATIONS

In 1951, at the time of that disastrous flood, Congress appropriated $25 million for emergency relief. This in no sense compensated for a billion dollars in losses. It did not pay for ruined crops or livestock destroyed or homes washed away. It could not make up for lost productive capacity and man-hours and disrupted transportation and communication. It did relieve human suffering, provided emergency shelter and food and medical aid.

In this same year the budget for fiscal 1952 recommended $5 million in construction funds for the Tuttle Creek Reservoir, taking into consideration the criteria established by President Truman. The House in 1951 denied all construction funds for Tuttle Creek, but this committee and the Senate, recognizing the importance of the project for the protection of the industrial areas of the Kansas Citys, as well as communities downstream and the rich agricultural areas along the river, restored the full amount. In conference, the funds were again deleted.

1953 BUDGET ESTIMATE

Last year the budget for fiscal 1953 which included only a limited number of urgently needed new construction starts, recommended $15½ million for Tuttle Creek. The House again denied all funds. But this committee and the Senate restored $10 million for the project. Five million was approved in conference. The Truman budget for fiscal 1954 recommended $15,800,000 for Tuttle Creek and this entire amount was deleted from the revised estimates submitted by Budget Director Dodge.

Mr. Chairman, I have said repeatedly—and it requires no advanced engineering skill to understand—that flood protection does not come from a project on the drawing boards, nor one that is merely authorized nor from one that is in a partial stage of construction. To be effective a flood control reservoir must be in operation. For this elementary reason, I can see no justification for delaying even further completion of this important project. I sincerely hope that we will not have another flood this year. That is much too costly a way to learn a lesson that we should have learned from our past experience.

ESTIMATED COST OF PROJECT

The present estimated cost of the Tuttle Creek Reservoir is $87,759,000, of which $6,750,000 has already been appropriated by the Congress. Contracts have been awarded and work is in progress on the first stage of the embankment and the outlet conduit; and in addition, land for the dam site and other tracts in the reservoir area have been acquired. If funds are not appropriated, all activities in connection with this project must be stopped. In addition to postponing the benefits that would accrue from a huge sum which the Government has already invested and the benefits which would result from the operation of the reservoir, there would be other costs to the Government.

Such action would mean cost to the Government of the necessary preparation for stopping the work. It would mean additional maintenance cost to the Government while operations are closed down. It would be uneconomical to the Government by upsetting the schedule of construction, and it would be costly to the Government because it would permit unnecessary deterioration of the work that has already been accomplished.

This last cost, incidentally, is one on which we should have learned our lesson from the experiences of the World War II period when practically all projects were held up in order to meet defense needs and suffered serious and expensive deterioration as a result.

VALUE TO DEFENSE EFFORT

This is not a project which is important only to one particular area. In our defense economy when so much of our national productivity is drawn from this section of the country and when this area is so vital in terms of communication and transportation, the Nation simply cannot afford further destructive and disruptive floods in that region. Just as a sidelight, I might point out that when an area suffers $1 billion in losses as happened in 1951, there is a corresponding loss in

taxes to the National Treasury. When businesses and farmers are unable to get back on their feet after a disaster such as this, not only do they suffer but the National Treasury suffers.

RESTORATION REQUESTED

I submit, therefore, Mr. Chairman, that it is economically sound and efficient and necessary to continue construction on this project so that it may be put into operation at the earliest possible date, and I earnestly urge that this committee restore the full amount of $15,800,000 for this purpose.

I might add that my knowledge of floods is not entirely academic at this moment since my office has been literally flooded with letters and wires and resolutions from people in the valley who are concerned about this project.

With your permission, I would like to submit some of these messages to this committee to be included in the hearings.

Senator KNOWLAND. That may be received.

(The communications referred to follow:)

JEFFERSON CITY, MO., *May 8, 1953.*

Senator THOMAS C. HENNINGS, Jr.
Senate Office Building, Washington, D. C.:

I strongly feel that Congress should immediately provide further funds for continuing work on Tuttle Creek Dam now in initial state. This dam is designed to materially retard flood waters which too often in recent years have caused great destruction on the Missouri River as it flows across our State. I strongly recommend that you urge Congress to approve an adequate appropriation for this essential project.

PHIL M. DONNELLY, *Governor.*

OFFICE OF THE MAYOR,
Kansas City 6, Mo., April 30, 1953.

Senator THOMAS C. HENNINGS, Jr.
Senate Office Building, Washington, D. C.

DEAR TOM: Our city can never forget the disastrous flood of 1951, which cost our people many millions of dollars in financial loss and presented a grave threat to the economic stability and future development of our city, and, indeed, to large areas in the entire Missouri River Basin. That which causes damage to the homes, farms, and industries of the Missouri and Kansas Valleys, directly and vitally concerns our own city's welfare and economy.

I am enclosing herewith a copy of Resolution No. 16601, unanimously adopted by our city council on April 24, 1953, memorializing Congress to help us in furtherance of a plan to end this threat of disaster by providing sufficient funds to continue the construction of the Tuttle Creek and Oahe Reservoirs, which is self-explanatory.

I cannot urge you too strongly to g've sympathetic consideration to the immediate continued prosecution of this flood-control program.

Sincerely yours,

W. E. KEMP, *Mayor.*

A RESOLUTION URGING THE CONGRESS OF THE UNITED STATES TO APPROPRIATE FUNDS FOR THE CONTINUANCE OF CONSTRUCTION ON TUTTLE CREEK AND OAHE RESERVOIRS.

Whereas disastrous Kansas River flood descended upon Kansas City, Mo., in July 1951, and brought upon our citizens untold suffering and property loss which, together with the cost of rehabilitation, resulted in an expenditure of many millions of dollars; and

Whereas the Missouri River flood in April 1952, caused extreme suffering to the people in the Missouri River Valley and resulted in an economic loss of untold millions; and

Whereas it is the firm conviction of the City Council of Kansas City, Mo., that these two specific disasters would not have occurred if the proposed system of retention reservoirs had been constructed in accordance with existing plans; and

Whereas it is common knowledge that the local flood-protection works in Greater Kansas City constitute only partial protection against the hazard of floods and the disaster type of flood such as that of 1951, would again repeat the untold damage and suffering which was occasioned in that year, and it is further recognized that in order that this local flood-protection work which has been constructed by the Federal Government at tremendous expense could be of reasonable value to the Greater Kansas City, the system of retention reservoirs must be constructed at the earliest possible date, in accordance with the overall plans for flood control for the Missouri River Valley. And the City Council of Kansas City, Mo., recognizes the great importance of the Tuttle Creek Reservoir as constituting the first step for affording complete protection in the Kansas River Valley between Manhattan, Kans., and the mouth of the Kansas River, and the Oahe Reservoir likewise, by its location at Pierre, S. Dak., will contribute a maximum degree of protection for lower river areas, including the Kansas City area; and

Whereas the city council is also aware of the fact that the joint influence of these two reservoirs would make a very great advancement in the protection of communities, industries, and agricultural lands on the lower Missouri River between Kansas City and St. Louis; and

Whereas the report of the Budget Bureau for the fiscal year 1954 does not recommend funds for the two projects above mentioned: Now, therefore, be it

Resolved by the Council of Kansas City That the Congress of the United States be requested with the most solemn urgency to make sufficient appropriations for Tuttle Creek and Oahe Reservoirs in order that these projects may proceed as rapidly as possible, consistent with efficient and economic construction practice.

Authenticated as adopted this April 24, 1953.

W. E. KEMP, *Mayor.*
MARGARET STRAHM, *City Clerk.*
By DALE M. GRAY, *Deputy City Clerk.*

THE CHAMBER OF COMMERCE OF KANSAS CITY,
Kansas City, Mo., May 7, 1953.

Hon. THOMAS C. HENNINGS, Jr.,
Senate Office Building, Washington, D. C.

DEAR SENATOR HENNINGS: At this moment I understand the Tuttle Creek Reservoir is the only project under construction in the Missouri River Valley that is not now included in the Federal budget.

The enclosed copy of letter which has been sent to the Civil Functions Subcommittees of both the House and Senate is self-explanatory.

The Kansas City Chamber of Commerce has constantly supported the Flood Control Act of Congress of 1944, providing for a comprehensive use and control of waters in the Missouri Valley. The Tuttle Creek Reservoir cannot be discriminated against on the ground of economy. We trust that you will use your best efforts to have the construction work continued on Tuttle Creek, together with the other going projects in the Missouri River Valley.

Kindest personal regards.

Sincerely,

J. C. HIGDON, *President.*

THE CHAMBER OF COMMERCE OF KANSAS CITY,
Kansas City, Mo., May 7, 1953.

CIVIL FUNCTIONS AND MILITARY CONSTRUCTION SUBCOMMITTEE, HOUSE APPROPRIATIONS COMMITTEE

GENTLEMEN: The control of floodwater in the Missouri River watershed is a matter of national concern and is not confined to individual communities or States. The act of Congress on June 22, 1936 (Public Law 738), and other succeeding acts recognize this fact.

The Flood Control Act of Congress, dated December 22, 1944 (Public Law 534), provides a general comprehensive plan for controlling water in the entire Missouri watershed and recognizes that the problem cannot be solved piecemeal. Substantial work has been done, but progress has been slow due to World War

II and the lack of appropriation of necessary funds by Congress to carry out the projects they have authorized.

Metropolitan Kansas City suffered a record flood from the Kansas River in 1951. Cities and States to the north of us suffered devastating floods from melting snows in the spring of 1952. Today, Kansas City, with 12 major rail lines, defense plants, livestock and food-processing concerns in which the Nation has an interest, awaits the next flood without adequate protection. Locally, the Kansas Citys have provided large sums of money to cooperate with the Federal Government in carrying out the act of Congress for controlling the waters of these streams over which the Federal Government has complete control.

The Tuttle Creek Reservoir on the Blue River, a tributary of the Kansas River, will, when completed, reduce floodwaters at Manhattan, Topeka, Lawrence, and the Kansas Citys. This project was first authorized by Congress in June 1938. The first appropriation for its construction was made 14 years later, in 1952, and the work is now under way. We urge you to include sufficient funds in the 1954 budget to continue construction on this key reservoir at an accelerated rate. The people of the three Kansas Citys at the junction of the Missouri and Kansas Rivers are united in this request.

Competent civilian engineers, as well as the Army Engineer Corps, have found the Tuttle Creek Reservoir necessary for the control of floodwater on the Kansas River. It would be false economy to stop the work that is already started. Heavy machinery used in construction of this kind cannot be moved to and from the site without added expense. Partially completed work may be destroyed by high waters if left unprotected for a long time. Every delay in constructing this reservoir continues the hazard of future floods with losses affecting the entire Nation.

The few hundred families whose property has been or is being acquired for the Tuttle Creek Reservoir are being paid well for their land and moving expenses, and properly so. Their lot is favorable contrasted with the lot of the 30,000 people who lost their homes and their businesses within a few hours in the July 1951 flood.

The rebuilt levees at the Kansas City and the agricultural levees below Kansas City are engineered for use with the supporting Tuttle Creek Reservoir. To shut down work on this partially constructed project would cost the taxpayers more—not less—in the end.

Respectfully submitted.

THE CHAMBER OF COMMERCE OF KANSAS CITY,
J. C. HIGDON, *President.*
GEORGE W. CATTS, *Executive Manager*

INDEPENDENCE CHAMBER OF COMMERCE, INC.,
Independence, Mo., May 9, 1953.

DEAR SENATOR HENNINGS: Attached hereto is a copy of resolution adopted by the board of directors of the Independence Chamber of Commerce concerning the flood-control program of the Federal Government.

The original resolution has been sent to the Missouri-Arkansas Basins Flood Control Association.

Very truly yours,

CARL WENNERSTEN, *Manager.*

Enclosures.

RESOLUTION

Whereas the members of the board of directors of the Chamber of Commerce of Independence, Mo., has been advised of recent developments curtailing the progress of flood-protection plans for this basin which have been developed over the past 20 years; and

Whereas the budget recommendations recently submitted to Congress not only make drastic reductions in the estimated funds required for local flood-protection plans but eliminates any provisions for funds requested to continue the dam and reservoir program deemed essential to the ultimate protection and welfare of this area: Now, therefore, be it

Resolved, That the board of directors of the Chamber of Commerce of Independence, Mo., in the interests of citizens of both Missouri and Kansas and because of the tremendous flood losses sustained by this area in the past, respectfully urge the Congress of the United States to appropriate additional funds for the immediate continuance of the construction of the Tuttle Creek Reservoir on the

Blue River, the Oahe Reservoir in South Dakota, the Webster, Kirwin, and Toronto projects and other long-planned dams and local programs considered necessary for the entire protection of this area from the economic, health, and security hazards such as those experienced in 1951. We find no evidence to justify deferral of such projects if the continuation of this program is maintained consistent with efficient and economic construction practices. On the contrary, the deferral of such construction can mean only a local and national loss at the present time and both economic and social disaster in the event of future floods.

Adopted this 2d day of May 1953.

W. Dexter Harvey,
W. DEXTER HARVEY,
President.
Carl Wennersten,
CARL WENNERSTEN,
Secretary.

RESOLUTION

Whereas the Lions Club of Independence, Mo., a part of Lions International, composed locally of 106 members, is interested in the social and economic welfare of our community and area; and

Whereas the board of directors of the Lions Club of Independence, Mo., duly assembled in a special meeting, has been advised of recent developments which will curtail the progress of the flood-protection plans for this basin which have been developed over the past 20 years; and

Whereas this group favors a continuation of the flood-control projects recommended by the United States Crops of Engineers, the Bureau of Reclamation, and the Soil Conservation Services of the Department of Agriculture; and

Whereas the budget recommendations recently submitted to Congress not only make drastic reductions in the estimated funds required for local flood-protection plans but eliminate any provisions for funds requested to continue the retention-reservoir program deemed essential to the ultimate protection and welfare of this area: Now, therefore, be it

Resolved, That the board of directors of the Lions Club of Independence, Mo., in the interests of citizens of both Missouri and Kansas and because of the tremendous flood losses sustained by this area in the past, respectfully urge the Congress of the United States to appropriate additional funds for the continuance of the construction of Tuttle Creek Reservoir on the Blue River, the Oahe Reservoir in South Dakota, the Webster, Kirwin, and Toronto projects and other long-planned dams and local programs considered necessary for the complete protection of this area from the economic, health, and security hazards such as those experienced in 1951 floods. We find no evidence to justify deferral of such projects if the program is maintained consistent with efficient and economical construction practices. On the contrary, such deferral can mean only a current local and national loss as well as economic and social disaster in the event of future floods.

Adopted this 7th day of May 1953.

LIONS CLUB OF INDEPENDENCE, MO.,
J. I. Dickeson
J. I. DICKESON, *President.*
W. Amos Esry
W. AMOS ESRY, *Secretary.*

RESOLUTION

Whereas the Rotary Club of Independence, Mo., composed of 78 men from the business and professional activities of the community, interested in promoting the general welfare of this area and the Missouri drainage area, and

Whereas the board of directors of the Rotary Club of Independence, Mo., duly assembled in regular meeting, have been advised of reductions of appropriations which will curtail flood-protection work and plans for this basin, and

Whereas the flood-control projects recommended by the United States Corps of Engineers, the Bureau of Reclamation, and the Soil Conservation Services of the Department of Agriculture are favored by this board, and

Whereas the recommendations of the Bureau of the Budget as given recently to Congress reduce estimated funds needed for local flood-protection programs, and omit appropriation estimates needed to continue the retention reservoir program deemed essential to the ultimate protection of this area from floods: Now, therefore, be it

Resolved, That the board of directors of the Rotary Club of Independence, Mo., because of the losses sustained in this city and in Jackson County in 1951, and the tremendous losses to citizens and agricultural and industrial interests of this area in the past, respectfully request the Congress of the United States to appropriate additional funds for the continuance of construction of Tuttle Creek Reservoir on the Blue River, the Oahe Reservoir in South Dakota, the Webster, Kirwin, and Toronto projects, and other programs regarded as necessary for the adequate protection of this area from a repetition of the disastrous effects of the 1951 floods. We consider deferment of the program unjustified and a continuance of the grave threat to the area which may well mean again a great local and national loss in the social and economic life of our citizens.

Adopted this 7th day of May 1953.

ROTARY CLUB OF INDEPENDENCE, MO.
KENNETH MORFORD, *President*.
MILTON MARKUS, *Secretary*.

KANSAS HIDE & WOOL CO.,
Manhattan, Kans., May 13, 1953

Senator THOMAS C. HENNINGS,
Senate Office Building, Washington, D. C.

DEAR SENATOR: The day is approaching for you to make your decision about whether funds will be restored in the budget for the completion of Tuttle Creek Dam.

We are desperately hoping that your decision will be in the affirmative. If funds are not restored for this vital flood protection undertaking, you can be quite sure that we in Manhattan and the other people in the Kansas River valleys certainly have one thing to look forward toward—that is another flood sometime in the future that will do to us again that which we have suffered before.

Without some large dams to control the crests of the rivers there is no way to keep the water from destroying us.

With your help and with your voting funds for Tuttle Creek, there is a chance that when nature wills floods in our part of the country, that the ravaging river crests may be controlled.

You can be very sure that your vote for providing funds for Tuttle Creek Dam will be appreciated by everyone who will receive protection from these ravaging rivers—if you can get the dam built in time to protect us before the next flood strikes.

Thank you for reading this letter and we hope that our wishes will be given consideration.

Very sincerely yours,

KANSAS HIDE & WOOL CO.
JACK GOLDSTEIN.

THE KANSAS CITY STOCKYARDS CO.,
Kansas City, Mo., May 8, 1953.

The Honorable Senator THOMAS C. HENNINGS, Jr.,
Senate Office Building, Washington, D. C.

DEAR SIR: As you know the United States Government has spent over $43 million building dikes and raising bridges in the Kaw Valley flood protection program.

There is no question the Tuttle Creek Dam is one of the most important steps in the Kaw Valley flood program which is now under construction and on its way to help the people in the valley at a cost of $5 million.

The United States Army engineers and others have made studies and surveys for the past 20 years on this program and all have agreed the United States Army engineers plan is the best and the Government has been working on their plan in the past years.

If you would check the loss to the United States Government on income taxes caused by the 1951 flood you would find that this project would more than pay for itself as will future savings if there were to be a flood in the next few years.

We people out here want the United States Government to reduce its expenditures and obligations as well as you do. Let's do it in a business like way. We should not waste the $48 million already invested in the Kaw Valley flood protection program.

Why not appropriate $5 or $10 million each year and get this job completed, as the whole Nation will benefit by this protection as well as the people in the Kaw Valley. Let's go forward, not backward because of an organized minority with selfish interests who are trying to stop this project.

Yours very truly,

E. E. LEWIS,
Assistant Secretary, Assistant Treasurer.

MEXICO, MO., *April 25, 1953.*

Senator THOMAS P. HENNINGS,
Senator STUART SYMINGTON,
Representative CLARENCE CANNON.

GENTLEMEN: I am writing to you three men as I feel that you are my personal representatives in our great democracy.

I see from the Kansas City paper that there will be a hearing concerning Tuttle Creek within the very near future in Washington, D. C.

This letter is written as a request that you take whatever steps are necessary to insure that the appropriation is left in the budget for the completion of the dam at Tuttle Creek.

I know that you have seen pictures, have heard descriptions, and have otherwise become familiar with the conditions that existed in the Kaw and Missouri River Valleys during the flood of 1951. I was there myself, personally. I saw misery, confusion, and devastation of property from Topeka to Kansas City that was as appalling as the destruction of Warsaw in World War II. As an escaped prisoner of war, I had the opportunity to see Warsaw after both the German and Russian Armies had passed over. No one wishes to see these conditions repeated again in the Kaw Valley.

The effects of floods of this type are not easily overcome. Cities located in the flood areas still show the effects of the high water, and the value of the property has been decreased. One of our stores in Armourdale was washed completely away. This store was owned and operated by two young ex-GI's who had put their wartime savings into the store and had just completed the payment on their indebtedness when this flash flood devastated their property. Not only was city property damaged, but one can easily see the effect of the flood on the farmlands in the Kaw and Missouri Valleys. Some of the most productive agricultural areas in our country lie in these valleys. In many cases, breaks in the levees and dikes in 1951 and in 1952 have caused these farmlands to lose their productivity. These farmers not only lost their crops, but their efforts in putting these crops into the ground, and in many cases have had their lands and buildings silted so as to have a depreciated value.

I am sure that everyone realizes that the Members of Congress have a most difficult decision to make in matters of this type; with the air of economy being so present at this time it is urgent that all appropriations be pared to the bone. On the other hand long-time capital improvements have always been an asset for any country. We firmly believe that should Tuttle Creek not be completed, the Government would probably stand to lose millions in revenue from income taxes, it would stand to lose a large investment in levees and dikes that they have now placed on the rivers, and the country would lose some of its most productive farmlands.

With kindest regards to each of you, and wishing you the most success in keeping the Tuttle Creek appropriation in the budget, I am,

Sincerely yours,

TONY B. LUMPKIN.

INTERNATIONAL BROTHERHOOD OF BOILERMAKERS,
IRON SHIP BUILDERS AND HELPERS OF AMERICA,
Kansas City 11, Kans., May 5, 1953.

Hon. THOMAS C. HENNINGS,
United States Senator,
Senate Office Building, Washington, D. C.

DEAR SIR: Under date of April 22, 1952, we sent to the Members of Congress a resolution adopted by the joint executive councils of the Amalgamated Brotherhoods of the International Brotherhood of Boilermakers and the International Brotherhood of Blacksmiths in annual session assembled in Kansas City and representing more than 200,000 members, thousands of whom live in this area. This resolution was entitled "Memorial to the Congress of the United States" and called their attention to the most appalling flood disaster which befell this area in the summer of 1951, and resulted in the inundation and devastation of farmlands, industries, and brought untold suffering to many thousands of people, which was repeated in a lesser degree in 1952.

Our disappointment over the apparent lack of interest on the part of Congress is rightfully shared by the residents of this entire area who, as patriotic American citizens, have a right to expect, from their duly elected representatives, that everything possible will be done to avert such catastrophes. It, therefore, comes as a profound shock that consideration is even being given, not to enlarging the scope of the work necessary to prevent these floods, but that an effort is being made to cancel the appropriations for one of the projects now under construction. In this respect, we have reference to the Tuttle Creek Dam, which constitutes such a vital and necessary link in this great undertaking. Tuttle Creek Dam is the most important single project in any and all plans for adequate flood protection in the Kansas River Basin and Kansas City, Kans.

Discontinuing construction of this dam would be nothing short of willful neglect and false economy, since it would not only leave the people in this basin to the mercy of torrential floods but it would jeopardize the industrial expansion of this area which has been making such an outstanding contribution to the Nation's welfare. It is indeed unfortunate that an organized minority, because of purely selfish interests, is attempting to make the Nation and Congress believe the reservoir system is the wrong way to prevent and control floods on the Kaw River. If these reservoirs had been built years ago the great flood of 1951, which was the most costly disaster to strike the United States, would either have been averted or definitely minimized.

As a Member of Congress the people of this area are counting on your support for the continuation of the Tuttle Creek Dam. Political differences must be submerged in the interests of the people so that the cherished hopes of many thousands in this area for the future may be maintained and the spector of reoccurring floods banished forever.

Our approach to this problem does not involve other fringe issues, such as irrigation, generation of electric power, or any other question, but wholly and completely our demand is that you please assist in restraining the devastating floodwaters of the Kansas River.

In behalf of the many thousands of members of our amalgamated brotherhoods residing in this area who are vitally interested in and will be affected by this decision and in the interest of the community at large, I remain

Cordially yours,

CHARLES J. MACGOWAN, *International President.*

JACOBS WAREHOUSE CO., INC.,
Kansas City 7, Mo., May 6, 1953.

Senator THOMAS C. HENNINGS, JR.,
Senate Office Building, Washington D. C.

DEAR MR. HENNINGS, JR.: I would like your cooperation and thought on the matter of flood control, for the Kansas-Missouri Valley.

It is my opinion that another disastrous flood of the 1951 proportion would seriously damage the economic, social, military, and security welfare of the Nation as a whole.

I believe if you will study the facts and figures presented to the factfinding committee of the 1951 flood you will realize what another catastrophe like that would mean.

For the sake of God Almighty and the millions of people affected let's please leave partisan politics out of a humanitarian issue.

If you were one who had witnessed the great tragedy, or had seen the ruins which was left in the wake, I am sure you will think as I and millions do, in this area.

Please back the Pick-Sloan program.

JOSEPH L. JACOBS, *Vice President.*

PEARSON-FERGUSON CHEMICAL CO., INC.,
Kansas City 1, Mo., May 7, 1953.

Senator THOMAS C. HENNINGS, Jr.,
Senate Office Building, Washington, D. C.

DEAR SENATOR HENNINGS: As representative of one of the flood-stricken industrial firms of Kansas City in 1951, I express my sincere hope and earnest prayer that you will do everything in your power to expedite and complete the vital Tuttle Creek Dam.

It is a recognized fact that flood protection is imperative—the argument is in regard to the system to be used.

Our best engineers tell us that the reservoir system, including the Tuttle Creek Dam, will do the job. Perhaps other systems would also be successful, but we have started work on one plan—why switch now, and waste all the planning and funds already expended?

It is true that any plan of flood control will take money, and that we are all economy minded. However, the expense contemplated for the Pick-Sloan plan including the Tuttle Creek Dam, would be peanuts as compared to the losses that would result from another disastrous flood.

I know that we can count on your support in our behalf.

Sincerely yours,

C. A. PATTERSON, *President.*

NEW FRANKLIN, MO., *May 7, 1953.*

Hon. THOMAS C. HENNINGS, Jr.,
Senate Office Building, Washington, D. C.

DEAR SENATOR HENNINGS: It is our understanding that the matter of appropriations for the continuance of flood-control work on the Missouri River will come up for hearings on the 11th and 12th instants, and we are very anxious that some action be taken looking to reasonable appropriations for the continuance of the flood-control work.

The loss of untold millions the past few years seems so uncalled for that we feel that it is time that the Federal Government should do something vastly constructive looking to the amelioration of the vast loss that our people have too long suffered.

We feel that you are in sympathy with our people in this cause and hope you will do everything in your power to see that provision is made to carry on the good work already started.

We are very much concerned about the fate of the Tuttle Creek Dam as this is no doubt one of the key dams in the program so ably laid out by the Army engineers, and we hope that ample appropriations will be made for its completion at an early date as well and the proper provision for carrying on the other work outlined by the engineers.

If the loss that the people of the valley have sustained from floods in the last few years could have been applied to the construction of the proper control measures there would have been money to pay for all the improvements with money to spare. Thanking you for your hearty cooperation, I am,

Yours very truly,

H. M. KINGSBURY.

MISSOURI LOAN AND INVESTMENT CO.,
Clinton, Mo., May 6, 1953.

Senator THOMAS C. HENNINGS,
Senate Office Building, Washington, D. C.

DEAR SENATOR HENNINGS: Surely you have not reached the point in the economy drive where it is necessary to drop such key projects as Tuttle Creek, on which a substantial amount of money has been spent.

If there has ever been a progressive step taken for the general welfare that did not have bitter opposition, I don't know what it was. I hope you can see your way clear to give this matter favorable support.

Respectfully yours,

L. L. DORRENCE.

THE KANSAS CITY SOUTHERN RAILWAY CO.,
LOUISIANA & ARKANSAS RAILWAY CO.,
Kansas City (5) Mo., May 6, 1953.

Hon. THOS. C. HENNINGS, Jr.,
United States Senate,
Senate Office Building, Washington, D. C.

DEAR SENATOR HENNINGS: Rumors are prevalent that proposed budget funds for continuing the work on flood control for the protection of the Kansas Citys and involving, among other things, Tuttle Creek Reservoir on the Big Blue River, a tributary of the Kansas River, have been omitted from the 1953–54 proposed Federal budget.

It is understood that former President Truman had indicated an item for this project of $15 million. Certainly, there should be not less than $5 million carried on the 1953–54 budget for continuing the work and initial appropriations for the commencement or beginning of other reservoir projects, since stopping the work now would add materially to the final costs. While other retarding reservoirs will be required in addition to Tuttle Creek Reservoir, it remains that Tuttle Creek Reservoir is of primary importance for flood control and flood protection of the cities extending from Wamego through the lower reaches of the Kansas River to and including the Kansas Citys.

We sincerely trust that this item, if omitted from the budget, will be restored in sufficient amount to carry on the work, since stopping the work entirely may extend the delay through the years. Another flood similar or larger than the one of 1951 would possibly inflict more damage and destruction than some of the communities that would benefit from the protection could stand.

Yours very truly,

A. N. REECE, *Assistant to President.*

LAWS & HUGGINS INSURANCE AGENCY,
Norborne, Mo., May 4, 1953.

Senator THOMAS C. HENNINGS.

DEAR SENATOR: I am writing you in regard to the Kaw and Missouri River flood-control protection. Especially the Tuttle Creek Dam on the Kaw River. We fellows in the Missouri River bottom were hit hard in the 1951 and 1952 floods. I think the engineers had a well-defined project set up to protect the bottoms and the cities along the river clear to St. Louis. I understand President Eisenhower is asking Congress to cut the appropriations for several of these dams, and a good many to be stopped entirely. It is my request to you to bring pressure to bear on Congress to carry this Missouri River flood-control project out as the engineers had planned. I had 800 acres, a total loss in 1951 and 460 acres, a loss in 1952.

From a farmer,

WALTER M. HUGGINS.

BRUNSWICK, MO. *May 6, 1953.*

Senator THOMAS HENNINGS.

DEAR SENATOR: As I am a land owner of 130 acres in the Missouri River bottoms south of Brunswick and have lost 2 crops straight from the floods, I am asking for you to do all you possibly can to get funds for the building of Tuttle Creek and Oahe Dams. We are not only losing our crops, but the muck and sand fills are ruining our land as we have hundreds of acres in our community that have from 2 to 4 feet of white sand washed on it, and it is almost worthless.

So will appreciate anything you can do toward getting us some protection.

Yours truly,

THEO. BLOCKBERGER.

BERT OFFUTT CO.,
Orrick, Mo., May 4, 1953.

Senator THOMAS HENNINGS,
Senate Office Building, Washington, D. C.

DEAR SENATOR: In regard to the Tuttle Creek Dam, of which there has been no appropriations made in the new budget.

We, ourselves, have 2,000 acres of land in the Missouri River Valley, east of Kansas City. This is a very fertile valley, just one of the many valleys which would be protected under the Pick-Sloan plan.

Speaking for the people in our community, we are asking that you do everything you can to get appropriations through for the Pick-Sloan plan.

We certainly do not want another disaster like the ones in 1951 and 1952.

Disregarding the fact that homes have been destroyed, farms ruined, livestock and crops lost, we, in our own locality had three railroads (Wabash, Santa Fe, and Burlington) washed out and telephones and electricity knocked out for several weeks, which not only was bad for the local community, but impaired communication and transportation across the whole country.

We want to commend you on your past work on this project and know that you will see it through.

Is there anything that we, as private citizens can do? If so, please advise us.

Very truly yours,

BERT OFFUTT CO.,
LUMAN OFFUTT, *Manager.*

LIBERTY, MO., *April 30, 1953.*

Senator THOMAS C. HENNINGS,
Senate Office Building, Washington, D. C.

DEAR SENATOR: I sincerely hope when the bill where the reinstatement of Oahe and Tuttle Creek Dams comes up to be put back in the budget that you can see fit to support the same and put it back.

In 1951, when the Kaw River was on the rampage, the upper Missouri River did not flood, but east of Kansas City the Missouri River did flood and very bad.

In 1952 the upper Missouri River did flood and east of Kansas City we had a very destructive flood. As we see it, if something isn't done to both Missouri and Kaw Rivers we will be flooded east of Kansas City by one or both of them.

The Government loses income taxes and other taxes because the people in that district are flooded out, then the Government in turn has to spend lots of money for relief and other purposes—so the Government loses either way it goes.

There seems to be no dispute with the Konopolis and Cedar Bluff Dams, they did hold back lots of water that would have gone down in the 1951 flood and would have made it much more disastrous than it was. If we get the Oahe Dam and some more dams on the upper Missouri to hold back waters, it will reduce the flood hazard from Kansas City to St. Louis. With the vast property investment both by the public, utilities and the railroads, that this is worth protecting.

Yours truly,

S. P. BOGGESS & SONS.
H. L. BOGGESS.

THE KANSAS CITY STOCKYARDS CO.,
Kansas City, Mo., May 8, 1953.

Hon. THOMAS C. HENNINGS, Jr.,
Senate House Building, Washington, D. C.

DEAR SIR: Referring to the recent action of the Appropriation Committee, disallowing any appropriation of moneys for continuation of work on the Tuttle Creek Dam in the Kansas River Basin. There was also disallowance action on two other dams, just as important in their own right, but Tuttle Creek construction is more vital to Kansas City.

The committee action was no doubt prompted by the realization of opposition to the project within the State of Kansas. This opposition is, from a national viewpoint, local and without consideration of national welfare. It is the activity of a small highly influencial, pressure group prompted entirely by selfish motives.

If this small group is successful in halting further work on the Tuttle Creek Dam and Reservoir, it means that the $43 million already spent will have been wasted. This is false economy. This small group will have swayed the Federal Government from performing its pledged duty of doing the most good for the most people.

Abandonment of this project will place thousands upon thuosands of people and billions of dollars in property at the mercy of future floods.

Volumes could be written on this subject, but if the Tuttle Creek Dam and the other recommended dams are not built, and if the local minority, opposition group put over their pet plan in the Kansas River Basin of providing gigantic "Flow Ways" (get the flood water out of the State in a hurry)—then they are increasing the flood hazard down stream in the Missouri River and into the Mississippi

River. Such unneighborliness is extended to a point of cruel, brutal selfishness. Let it not be so.

Please accept our suggestion, and plea, that you follow the advice and recommendations of the largest group of hydraulic engineers in the world—the Corps of Army Engineers. Follow their recommendations after many, many years of diligent work and study and make the necessary appropriations so that the work can continue, without interruption, on the Tuttle Creek project, and so that all other recommendations for the basin can eventually follow through to their ultimate completion.

This is a national matter. Many States will be affected by your actions on it. It is a matter much bigger than any one State, or any small locally influential selfish group.

Please give this matter your most earnest consideration toward the end of completing a job, well started.

Most respectfully,

R. O. SAGE, *Chief Engineer.*

KANSAS CITYS' PROTECTION

Mr. Chairman, in addition to cutting our funds for Tuttle Creek, the new budget recommendations drastically reduced funds for local flood protection at the Kansas Citys. The Truman budget recommended $1,975,000 for this work, while the new budget reduced this to less than half the amount needed and included only $750,000. This full amount, in my opinion, should be restored for fiscal 1954.

TABLE ROCK RESERVOIR

A second Missouri project for which funds have been arbitrarily denied in the new budget is the Table Rock Reservoir. This project was authorized by the Flood Control Act of August 18, 1941, but progress on this project, too, was curtailed because of the needs of national defense.

Last year, in consideration of the criteria established by President Truman, and because Table Rock was considered essential for defense, a supplementary budget request in the amount of $3 million for this project was sent to the Congress. Even before that supplemental request reached the Congress, however, this committee, recognizing the urgent need for the project, had reported out the civil functions appropriation bill including $3 million in construction funds for Table Rock. This amount was retained in conference and at long last work was started.

Not only is the Table Rock Dam important from the standpoint of flood control, but it has been, as I have mentioned, classified essential to the national defense because of its power capacity. For these reasons the Truman budget recommendation included $10.8 million, but in spite of these facts the new budget recommendation contains not one penny for the project.

Senator CORDON. Could you tell us what the power capacity of the dam is?

Senator HENNINGS. I hope to get to that in the rest of the statement, Senator.

The Table Rock Reservoir is part of a comprehensive and integrated plan for the development of the White River Basin. From the standpoint of power, the project is designed to operate in conjunction with Bull Shoals Reservoir. Not only would it increase the prime power at Bull Shoals, but it will also increase the power output of the private plant at Ozark Beach Dam, owned by the Empire District Electric Co.

NEED FOR POWER

The need for power in the area of the Table Rock Reservoir is well known.

This is an extensive agriculture and food-processing region; and all the operations of farming as well as fruit and vegetable canning, of dairying, and processing and refrigerating of other farm products, depend to a very great extent on the availability of power at reasonable rates. It has, in fact, been estimated by the Federal Power Commission that in the 4-year period that would be required to construct the Table Rock Reservoir, the demand for power would be double what it is today.

Moreover, the large aluminum plant which will shortly be in operation near Arkadelphia, Ark., will consume practically all of the power available from Bull Shoals so that the additional capacity that would be available from Table Rock is urgently required to replace the conscripted Bull Shoals power and to meet the power needs of the preference customers; that is, the REA's and those communities which have their own municipal power systems.

Table Rock itself will not solve the entire problem. It is planned, however, for an installed capacity of 84,000 kilowatts, 39,500 of which is prime power. This, added to the fact that it is designed so as to add 13,400 kilowatts of prime power to Bull Shoals downstream, would be of tremendous help. The hydroelectric benefits are self-liquidating. They are in the nature of a loan which is paid back out of the sale of power to the consumers in the area.

PRESENT INVESTMENT

Senator McCLELLAN. I believe out of the $3 million appropriation we got last year to start this project, $1 million of that has actually been expended by the Corps of Engineers and about $500,000 is presently obligated. So there is a million and a half dollars actually invested by the Federal Government in the start of the project.

Senator HENNINGS. I thank the Senator for that contribution. The Senator is, of course, correct. One million and a half has actually been spent.

ANNUAL FLOOD DAMAGE

From the standpoint of flood control, I would point out that annual flood damage in that basin has been estimated at over $2 million with all the attendant losses of productivity.

Other witnesses who have appeared before this committee have discussed in some detail the activities undertaken by local people and communities in anticipation of continued construction and completion of the Table Rock Reservoir—activities such as voting bonds for an additional school building and providing housing to meet the needs of personnel and workers on the project and of the increased population which would follow the construction of the dam. Other activities included securing and paying for right-of-way easements for access roads to the dam site, constructing additional wells, water tanks, and water mains and various other related work.

I might point out that the sentiment in favor of this project has been overwhelming, and that it has not come from any single group.

There is, rather, strong bipartisan support from businessmen, farmers, bankers, chambers of commerce, newspapers—as well as from municipalities and REA co-ops who would be preference customers for the power generated at this project.

SENTIMENT OF RESIDENTS

Let me quote just a couple of paragraphs typical of the sentiments expressed by residents of the area:

For over 40 years my business has been outfitting fishing parties for float-trip fishing on the White, James, and Kings Rivers. Table Rock Dam would completely eliminate these streams for float-trip fishing and put us out of the float business, but we are in favor of the dam for the good it would do this whole region of southwest Missouri and northwest Arkansas. I also have a farm on the James River and the backwater would cover all of my low ground, but I am still in favor of the dam. I know that most all the property owners on these various streams are of the same opinion as I am.

And here is another quote:

The people living in Stone County are the ones that will be mostly affected by the construction of Table Rock as we understand that approximately 65 percent of the backwater will be in our county. Nevertheless, 90 percent of the people here are for its construction, and the farmers whose land will be covered are almost unanimous in support of the dam. In fact, in one area on the river, the farmers on 36 farms signed petitions for the construction of the dam.

Mr. Chairman, as early as February of this year when it was announced by the district engineer in Little Rock that the budget request for Table Rock Dam would be scrapped, I protested to the Secretary of the Army pointing out how essential this project is to our national defense. The Secretary of the Army advised me at that time that pending final decision on the budget, the Army was proceeding with existing contracts for the construction of an access road and administrative facilities at the site "in order to avoid deterioration of work already accomplished."

If construction is halted at this point, however, by cutting off funds, the Government would be confronted with the same unnecessary costs which I have pointed out in the case of the Tuttle Creek Reservoir.

RESURVEY PROMISED

President Eisenhower, incidentally, has, within the last few days, assured a delegation from Arkansas that he would have a resurvey made to determine whether to recommend the necessary appropriation for Table Rock.

In view of the essential nature of the Table Rock project to our national defense, to meet the increased power demands for the aluminum plant and for agricultural production and food processing as well as for the development of bauxite, manganese, and other valuable metals; and in view of its flood-protection aspects; and, finally, in view of the fact that construction has already begun, it is my earnest conviction that it would be both unwise from a defense standpoint and unsound from an economic standpoint to abandon Table Rock project now.

I therefore urge, Mr. Chairman, that this committee restore the $10,800,000 needed to carry on construction work at Table Rock in fiscal 1954.

CAPE GIRARDEAU

If Missourians feel that they have somehow received the short end of the straw on civil functions, there is good justification. Not only were all funds cut out of the 1954 budget recommendations for Tuttle Creek and Table Rock, but all construction funds were likewise deleted for the important Cape Girardeau flood-control project.

As members of this committee will recall, last year the approved budget estimate to begin construction work at Cape Girardeau was $1 million. The House of Representatives red-penciled the entire item, allowed no funds at all for the project. Once again it was this committee which reorganized the need for flood protection and which restored funds in the amount of $600,000. Now I do not propose, Mr. Chairman, that we should have devastating floods every year just so that we can take skeptical Congressmen or Senators out to the flood area and let them see at first hand the horrible example—and utter waste and destruction caused in unprotected areas by the ravaging floodwaters. But I do suggest that if more Members of the Congress could witness the disaster for themselves as did some of the members of this committee who visited Cape Girardeau at the height of the 1951 flood, they would come away with unforgettable memories, not only of loss and of tragedy, but of the valiant efforts of the citizens of the communities against overwhelming odds.

PROJECT ESSENTIAL TO NATIONAL DEFENSE

The $600,000 was approved by the full Senate but was, I regret to say, again deleted in conference so that effective flood protection for Cape Girardeau was postponed still another year. I might add that the budget recommendation of $1 million last year was made under the criteria whereby only those projects considered essential to the national defense were included for new construction funds. That this determination was, and is, justified, I feel, evident from the following facts:

The Frisco Railroad, which carries important shipments of defense items and is one of the most strategic lifelines of our national transportation system, passes through Cape Girardeau. When its tracks are covered by several feet of water as was the case in 1951, these shipments either suffer costly delay or must be rerouted, thereby overburdening other lines.

In addition to the railroad lines, the area of the city subject to flood damage is an important industrial area containing, among other things, a large shoe factory working on Government contracts, a generating plant which supplies electricity for Cape Girardeau and surrounding areas, gasoline and fuel storage plants, small shipyards, a water plant, meat-packing business, wholesale food businesses, lumber and building-supply businesses, and others.

FREQUENCY OF FLOODS

The Truman budget estimate for fiscal 1954 included $989,000 for construction work at Cape Girardeau. The new budget estimate, as I have said, allows not 1 cent. Cape Girardeau has been seriously flooded 7 times in the last 10 years. Residents of Cape Girardeau who

have given much time and study to their problem point out that while flood stage at the cape is 32 feet, during the entire hundred years before 1953 the river rose to or above 38 feet only 3 times as compared to the record of 7 times in the last 10 years.

It is the contention of the local people that levees constructed on the Illinois side of the Mississippi together with upstream levees on the Missouri and its tributaries have increased the frequency and seriousness of the floods at Cape Girardeau. There seems much from the engineering standpoint to sustain their contention in that.

Senator CORDON. In attempting to cure one ill, we created another?

Senator HENNINGS. You are right. The work done on the Illinois side has pushed the water over onto the Missouri side as has some of the work upstream. That this has hurt Cape Girardeau is indicated by the fact that in the last 10 years they have had troubles; whereas, theretofore they had only 3 floods in almost a hundred years.

Senator KNOWLAND. We had some photographs here the other day that looked like the railroad would have to operate a submarine line under certain conditions.

Senator HENNINGS. They just cannot get through. That is the main line from St. Louis down south which serves Senator McClellan's State and goes down to Senator Ellender's State and makes connections through the South and Southwest.

COMMUNICATIONS

Mr. Chairman, I would like to include in the hearings at this point information contained in a letter from Mr. Arnold Roth, president of the Cape Girardeau Chamber of Commerce, and E. J. Bauerle, chairman of their flood-control committee.

(The information referred to follows:)

The raised hopes of the city of Cape Girardeau and its citizens for flood protection have again been dashed by the removal from the fiscal 1954 budget of the $989,000 allocated for flood protection for this city. The Cape Girardeau Chamber of Commerce is solidly in favor of flood protection for this city. Cape Girardeau is the largest and most important city on the west bank of the Mississippi River between St. Louis and New Orleans. It is the only city on this west bank without flood protection. Our Cape Girardeau section is the only unprotected part of the river south of St. Louis to the Ohio River. Cape Girardeau has not asked for flood protection until recent years when we have had almost annual disastrous floods. These floods have been caused by the work of the Government in protecting the shores of Illinois above us and across from us and the shores of Missouri above us. This has resulted in turning the natural asset of the Mississippi into an uncertain liability.

Having been founded upon the river, Cape Girardeau has naturally built from the river and practically all of our industries, much of our retail section, and several hundred dwellings are subject to these almost annual floods.

Without flood protection, the health and safety of our city is continually threatened. Our utilities plant has been saved through several of these floods only by superhuman effort, and if the utilities flooded out our power would cease, our water supply would be threatened, and eventually completely depleted. We would find it difficult to combat the hazards of fires as well as having a health hazard. Naturally, all our commerce, industry, and business would come to a standstill if a flood should close our utilities plant. There is no question that the failure to properly safeguard this city from the ravages of the Mississippi floods threatens the health, safety, and jobs of the 25,000 people living in Cape Girardeau as well as the jobs of many who depend upon Cape Girardeau for work.

Cape Girardeau has always regarded the Mississippi River as an asset. We are proud to see increasing commerce upon the river and we are making improvements upon our waterfront to take care of river traffic. When a flood hits us, no

water traffic can stop in Cape Girardeau. As a matter of fact, there is no traffic to Cape Girardeau—commerce stops. The Frisco Railroad which follows the Mississippi from St. Louis to Memphis, Tenn., and the Missouri Pacific Railroad cannot bring their trains into Cape Girardeau. Mail, express, and freight schedules are disrupted. Furthermore, if it had not been for the fact that the Missouri State Highway Department has only recently raised the grade of its highway south of this city, truck and automobile traffic into Cape Girardeau from the south and west would be impossible when the river is up beyond the 38-foot stage. The Mississippi in flood forces circuitous routes to Cape Girardeau.

While the Cape Girardeau Chamber of Commerce realizes that this first appropriation of $989,000 will not complete flood protection for Cape Girardeau, it does think that a start should be made. The Cape Girardeau Chamber of Commerce believes in all fairness that this city and its citizens should not be forced to bear the punishment of Mississippi floods which would not have occurred without the levee protection already afforded property and citizens along the Mississippi across the river and above us.

We respectfully urge that the Congress reinstate this item in the budget and hope that you will continue to appropriate sums in the future to provide our city and citizens with the same protection afforded other areas and cities along the Mississippi. We cannot believe that the United States Government and its Congress will discriminate against Cape Girardeau.

This letter expresses the case concisely, Mr. Chairman, and I add to it my hope that this committee will restore $989,000 for construction of the flood-protection project so badly needed at Cape Girardeau.

MISSOURI RIVER AGRICULTURAL LEVEES AND UPSTREAM HOLDING RESERVOIRS

I would like to say just a few words, Mr. Chairman, about the agricultural levees along both banks of the Missouri River from Sioux City, Iowa, to the mouth for the protection of agricultural lands and small communities against floods. When completed, the 153 individual levee units will afford protection to approximately 1½ million acres of land and some 50 small communities. Eighty-one of these individual units are planned to be located within the State of Missouri and would protect 630,000 acres of rich agricultural land and 32 small communities. The levees are designed for flood protection in conjunction with the upstream reservoirs. Completion of the upstream reservoirs will reduce flood heights, but complete protection can be provided only by construction of the levees.

TARKIO SQUAW LEVEE DISTRICT

I would like to mention particularly the levees in the Tarkio Squaw Levee District. This district comprises about 80,000 acres in which is included the Squaw Lake Wildlife Refuge, the Big Lake State Park, and 5 communities, as well as agricultural lands. It is my understanding that plans and specifications for this project are complete. In their budget request for fiscal 1951, the Army engineers included construction funds for this levee. However, the President's directive curtailed all work of this nature after the Korean hostilities developed; and since that time, all funds for this levee work have been reduced to a bare minimum, sufficient only to continue work on projects already under construction. No funds are included in the proposed budget for fiscal 1954 for this work.

Members of the Tarkio Squaw District point out that the levees which have already been constructed north and south of their district

and opposite them on the Nebraska-Kansas boundary of the Missouri River, have served to increase the danger of floods in their district.

I call these facts to the attention of this committee so that funds for the Tarkio Squaw project may be appropriated as soon as possible. It is certainly a worthwhile project and of great importance to the thousands of farmers in the area, and it has a high construction priority. With your permission, I would like to include in the hearings wires which I have received on this project from mayors of several communities.

Senator KNOWLAND. That will be accepted for the record at this time.

(The information referred to follows:)

CRAIG, MO., *May 8, 1953.*

THOMAS C. HENNINGS, Jr.
Senate Office Building, Washington, D. C.:

The building of upstream dams and levees for the protection of this area are a vital necessity. The Missouri River Flood Protection Association is presenting their cause through appointed representatives before the Senate Appropriations Committee May 13. We endorse the program in its entirety and urge the committee to include in the Federal budget the funds necessary to accomplish this objective. We ask your assistance. Holt County is pocketed, agriculture levees having been put in above and below us. We are at the mercy of the Missouri River every time it is out of its banks. The city of Craig built a levee around the town and kept the floodwaters out of town last year. The water was 5 feet deep on the outside of our levee. We bonded our town to pay for the levee after the flood.

Dr. I. F. DOPP, *Mayor, Craig, Mo.*

FOREST CITY, MO., *May 8, 1953.*

THOMAS C. HENNINGS, Jr.,
Senate Office Building, Washington, D. C.:

The Missouri River Flood Protection Association is presenting through appointed representatives a petition before the Senate Appropriations committee on May 13. We concur completely in the statements contained therein and wish to urge the committee to include in the Federal budget necessary funds for the building of upstream dams and levees for the protection of this area.

O'NEIL HICKS,
Mayor, City of Forest City, Mo.

MOUND CITY, MO., *May 8, 1953.*

THOMAS C. HENNINGS, Jr.,
Senate Office Building, Washington, D. C.:

The building of upstream dams and levees for the protection of this area is a vital necessity. The Missouri River Flood Protection Association is presenting its cause through appointed representatives before the Senate Appropriations Committee May 13. We endorse the program in its entirety and urge the committee to include in the Federal budget the funds necessary to accomplish this objective.

JOHN LAUKEMPER,
Mayor, City of Mound City.

GAVINS POINT RESERVOIR

Finally, Mr. Chairman, I would like to say a word about other upstream reservoirs. On the Gavins Point Reservoir, the Truman budget request was $17,800,000. In the new budget this was reduced to $12,900,000. On Fort Randall, the Truman budget recommended $22,700,000, while the new budget cut this to $14,700,000.

GARRISON DAM

On the Garrison Dam the Truman budget proposed $39 million, and the new budget includes only $31 million. For Oahe, the Truman budget recommended $14,800,000, and the new budget originally included no funds at all. I understand, however, that a supplemental request for $8¼ million for this project has been sent to the Congress.

Completion of these reservoirs is essential to an effective flood-control program in the Missouri Basin. I hope that this committee will view these projects in terms of overall flood protection and will approve funds so that work on all of them can proceed as expeditiously as possible.

I thank you very much, Mr. Chairman and gentlemen, for your patience.

THE DALLES DAM

Senator KNOWLAND. We now have some witnesses here appearing in opposition to The Dalles Dam in the Pacific Northwest, and we are operating now under the rules applying to outside witnesses. We will ask the cooperation of the witnesses. I would say each of them may have their full statement printed in the record. I understand that while there are a number of people who are appearing, one person will act as the spokesman for the group.

I have a letter here from Senator Morse of Oregon in which he had indicated his interest in having a hearing held. I would say that the committee has followed a policy for a good many years of arranging to permit witnesses both for and against projects to testify. We have had quite a number of additional requests from various people out there in other sections of the country requesting hearings.

The letter from Senator Morse will be placed in the record at this point.

(The letter referred to follows):

UNITED STATES SENATE,
Washington, D. C., May 18, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: May I take this opportunity to thank you and the members of the Senate Army Civil Functions Subcommittee for conducting a hearing at which all interested parties are afforded an opportunity to present their views concerning the effect of the Dalles Dam on the Indian fishing rights at Celilo Falls.

This hearing was scheduled at my request by the Honorable Styles Bridges, chairman of the Senate Appropriations Committee, and in my opinion it provides an outstanding example of the willingness of the Congress to afford the citizen the right "to come to the seat of government to assert any claim he may have upon the Government, or to transact any businesses he may have with it."

The subject of this hearing is one upon which citizens of my State have great diversity of opinion. Therefore, I hope that the subcommittee will, after due consideration of the testimony adduced today, submit a report together with recommendations to the Senate Appropriations Committee. Such a report and recommendations will be of great assistance to those of us from the Pacific Northwest who are desirous of studying this difficult issue on its merits.

Sincerely yours,

WAYNE MORSE.

Senator KNOWLAND. The first witness will be Paul M. Niebell.

THE YAKIMA INDIAN TRIBE

STATEMENT OF PAUL M. NIEBELL, OF WASHINGTON, D. C., TRIBAL ATTORNEY

OPPOSITION TO PROJECT

Mr. NIEBELL. I am attorney for the Yakima Tribe of Indians. We have outlined the hearing for you. If you will permit me, we will go right ahead with that outline.

Let me say to the committee we do appreciate the courtesies we have received heretofore before this committee, and we certainly thank the committee for giving us the time that it has.

Primarily, the Yakima Tribe is not asking the committee for money. Every other request seems to be for money. We are trying to save the Government money.

The Yakima Tribe is opposed first and last to the construction of the Dalles Dam for this reason: That it will completely destroy its fishing rights in the Columbia River at and in the vicinity of Celilo Falls. It is a traditional site. It is owned by the Yakima Tribe by immemorial possession. It is tied up with their economic life and also in their religious ceremonies. So anything that would affect the rights of the Yakima Tribe to these fishing locations certainly would deeply affect the tribe as a whole.

The treaty of 1855 between the United States and the Yakima Nation reserved to the Yakima Tribe the usual and accustomed fishing places along the Columbia River.

Ever since that time the tribe has very zealously guarded these rights and the United States, as its guardian, has prosecuted these rights and protected them through the courts.

Let me say here that the only treaty protecting fishing rights at Celilo Falls is the Yakima Treaty. I have cited some cases in the record to support that claim.

ENFORCEMENT OF TREATY REQUESTED

The Yakima Tribe says it would like to have Congress stop this appropriation and protect their fishing rights. They cannot understand why their treaty has not been enforced as it was in the years past. They say, if you want to destroy our fishing rights, we want you to come to us and get our consent before you do it.

They cannot understand. They do not need money. They say money will not compensate them for the loss of their fishing rights because it is so deeply affecting the tribe as a whole.

There are many Indians who depend almost entirely upon these fishing rights and they will be thrown upon the tribe for help and protection.

However, if Congress in its wisdom decides to continue appropriations for the dam, the Yakima tribe believes that a fair compensation should be awarded to the tribe for the loss of its fishing interests. They say, we are the traditional owners there; that when salmon began to get scarce other tribes came down upon this site.

They have used the site at the sufferance of the Yakima people. In any settlement, the Yakima interests should be first considered as they are the immemorial owners of this site.

YAKIMA TRIBE POSITION

Let me make their position plain to the committee. We are not concerned with any settlements that the Army engineers might make with the other tribes, so long as it does not limit the amount the Yakima Tribe would ask as compensation for its rights. We had one session with the Army engineers, and we found the amount was limited by the engineers themselves. They said, "Now here is what the site is valued at. This is what your part of it is."

It was a matter of dictation to the tribe and not of "negotiation." In any negotiation, we believe that the rights and interests and the considerations of the Yakima Tribe should be considered.

Senator CORDON. You understand the Yakima Tribe has a legal right to go to court to determine what its damages are?

Mr. NIEBELL. That is right.

Senator CORDON. And that is a right that it has?

Mr. NIEBELL. That is right; under the treaty and for the violation of the treaty, that is right. That is primarily the position of the tribe.

They oppose the dam. They oppose the construction of it because it cuts deeply into the economy and it affects the religion of the tribe.

FAIR SETTLEMENT URGED

Secondly, if there is an appropriation to continue the Dalles Dam, then there ought to be a fair settlement worked out with the Yakima Tribe along with these others. We ask the Congress not to approve any agreements until the legal owners come in and their rights are considered.

Senator MCCLELLAN. Would the construction of the dam not greatly enhance fishing in that area?

Mr. NIEBELL. I think it has been found it will destroy a good bit of it.

Senator MCCLELLAN. There may be a different situation in my State, but construction of these dams and creation of the lakes was a great boon to the fishing industry. It may be a different situation there.

Mr. NIEBELL. We have a biologist here who could testify better on that point.

I understand every dam that is built in the Columbia River destroys a certain portion of the run. I understand, too, that 15 percent is worked out as the percentage of destruction of the fish runs, the salmon fish runs in the Columbia River, as a result of the Bonneville Dam.

UPSTREAM FISH RUN

The trouble is not with the run upstream so much, although there is some loss there where the fish do not get through the fish ladders; it is in the small fish, fingerlings, as they come down the river, and many of them have to go through the turbines there and are destroyed. Some that go over the dam are destroyed.

If you continue to build these dams, it will take a toll of the fish until there will be hardly any salmon runs spawning in the Columbia River.

Senator MCCLELLAN. The principal thing is whether the fish are more important.

Mr. NIEBELL. That is within your power to decide.

The next witness on behalf of the tribe is Mr. Wilson Charley, a member of the tribal council of the Yakima tribe.

First, may I have my statement made a part of the record.

Senator KNOWLAND. Your statement will be accepted and made a part of the record.

(The statement referred to follows:)

STATEMENT OF PAUL M. NIEBELL OF WASHINGTON, D. C., TRIBAL ATTORNEY FOR THE YAKIMA TRIBE

The Yakima Tribe is strongly opposed to the construction of the Dalles Dam, because it will completely destroy its traditional fishing locations along the Columbia River at Celilo Falls, and vicinity.

From time immemorial the Yakimas have been taking salmon from the Columbia River at Celilo Falls, and vicinity, and fish was and is the chief source of subsistence for the Yakima Tribe. Not only was the salmon a main source of food supply for the tribe but it formed the basis for its religious beliefs. Any action of the United States Government which would destroy this part of the subsistence of the tribe and upset the economic life of the tribe, and interfere with the religious life of the Yakimas would affect them deeply.

By their treaty with the United States of June 9, 1855 the Yakimas reserved the right to fish in their usual and accustomed fishing locations along the Columbia River. The Yakima Tribe believes that the United States should respect this treaty even today as it has in the past, and do nothing which would violate its terms, without first consulting with the Yakima Tribe, and securing its consent.

In 1855, when the Yakima Treaty was made, the Yakimas, together with the Warm Springs Tribe of Oregon, owned the fishing location at Celilo Falls. The Warm Springs Indians relinquished to the United States all of their fishing rights at Celilo Falls by the Hunnington Treaty of 1865, leaving only the Yakima Tribe as lawful owners of the fishing locations in this vicinity. Therefore, the Yakima Treaty is now the only one which protects the fishing at these locations. The Yakima Tribe through the years has jealously guarded its fishing rights against the encroachments of the whites, and it, and the United States, as guardian of the Yakima Tribe, has enforced these rights through various court actions. For instance see: *United States* v. *Taylor*, 13 Pac. 333; *United States* v. *Winans* (198 U. S. 371); *Seufert Brothers Co.* v. *United States* (249 U. S. 194, 63 L. Ed. 555); *Tulee* v. *State of Washington* (315 U. S. 681, 86 L. Ed. 1115).

The Umatilla Tribe and the Nez Perce Tribe have traditional fishing locations along the Columbia River and its tributaries which were reserved to them in their treaties with the United States. These locations were close to 200 miles or more up the Columbia River from Celilo Falls, nearer their reservations. When salmon were plentiful the members of these tribes secured a plentiful supply for their needs at their traditional fishing locations.

When the large runs of salmon began to diminish fisherman from these tribes came down to the Yakima locations at and near Celilo Falls, and fished there at the sufferance of the Yakima Tribe, the traditional owner of the site.

The Yakima Tribe still hopes and prays that its fishing locations at and near Celilo Falls will be preserved to it, and urges Congress to stop further appropriations for the Dalles Dam, which, if constructed, will completely destroy these traditional and historic fishing locations of the Yakima Tribe along the Columbia River at and near Celilo Falls.

However, should Congress continue appropriations for the construction of the Dalles Dam during this session of Congress, then the Yakima Tribe feels that a satisfactory agreement should be made to compensate it for the loss of its fishing rights at Celilo Falls.

The Army engineers seek to negotiate an agreement with the Yakima Tribe, and seem to resent the fact that the Yakima Tribe has continued to protest the construction of the Dalles Dam. Representatives of the Yakima Tribe met with the representatives of the Army engineers in Portland, Oreg., to discuss an agreement of settlement. However, the Yakima Tribe learned at this conference that the Army engineers had fixed ideas of the terms of settlement, and indicated that any agreement would have to be made only upon that basis. In other words, the Yakima Tribe found out that it would have to accept an agreement, the terms of which were to be dictated by the Army engineers; that an agreement was not to be worked out between the parties by "negotiation," but solely upon terms imposed

and dictated by the Army engineers. The Yakima Tribe would not consent to any such agreement, and feels that in any negotiations for an agreement, the well-considered views of the tribe should be respected, considered and given sympathetic treatment. An agreement can be worked out in no other way.

In the meantime, agreements have been executed by the Army engineers with the Warm Springs and Umatilla Tribes, upon a tribal population basis, because of the use by members of these tribes of the Celilo fishing location, under the circumstances set forth above. Although the Warm Springs Tribe ceded all of its rights to this location to the United States in 1865, and the Umatilla Tribe had no claim to immemorial ownership to this location, but were merely using the site at the sufferance of the Yakimas, each of these tribes has been given approximately $4 million of the total valuation of the site as fixed and determined by the Army engineers. The Army engineers further propose to give the Nez Perce Tribe $1 million of the total valuation, although they had no claim to immemorial ownership to these locations, but were also merely using the sites at the sufferance of the Yakimas.

The Yakima Tribe, the traditional owner by immemorial possession of these fishing sites, has not been consulted in these settlements, and it understands that these agreements are to be submitted for the approval of Congress at this session. The Yakima Tribe requests that Congress withhold its approval of these agreements until the Yakima Tribe, the lawful owner, has had an opportunity to negotiate a fair agreement for compensation of its fishing location at Celilo Falls, which will be lost to it by the construction of the Dalles Dam.

Submitted herewith for the consideration of the committee is a copy of the Stevens Treaty Map of June 12, 1855, which shows the locations of the respective tribes, and a brief in support of the position of the Yakima Tribe.

Treaty With the Middle Oregon Tribes of November 15, 1865

(Treaty with the Warm Springs Tribe, 14 Stat. 751)

Article 1. It having become evident from experience that the provisions of article 1 of the treaty of the twenty-fifth of June, A. D. eighteen hundred and fifty-five, which permits said confederated tribes to fish, hunt, gather berries and roots, pasture stock, and erect houses on lands outside the reservation, and which have been ceded to the United States, is often abused by the Indians to the extent of continuously residing away from the reservation, and is detrimental to the interests of both Indians and whites; therefore, it is hereby stipulated and agreed that all the rights enumerated in the third proviso of the first section of the before-mentioned treaty of the twenty-fifth of June, eighteen hundred and fifty-five—that is to say, the right to take fish, erect houses, hunt game, gather roots and berries, and pasture animals upon lands without the reservation set apart by the treaty aforesaid—are hereby relinquished by the Confederated Indian Tribes and Bands of Middle Oregon, parties to this treaty.

* * * * * * *

Article 5. It is stipulated and agreed on the part of the United States, as a consideration for the relinquishment of the rights herein enumerated, that the sum of three thousand five hundred dollars shall be expended in the purchase of teams, agricultural implements, seeds, and other articles calculated to advance said confederated tribes in agriculture and civilization.

Statement of the Yakima Indians in Defense of Their Vested Fishing and Property Rights at Celilo Falls in the Columbia River That Will Be Destroyed by the Construction of the Dalles Lock and Dam

The fishing rights of the Yakima Tribe of Indians in the Columbia River at and near Celilo Falls, Oreg., have been jealously protected throughout the years by the United States, as guardian and trustee of the Yakimas, in the halls of Congress and in the courts of the United States and the State courts of Oregon and Washington. The Yakima Tribe has likewise on its own behalf continuously and judiciously defended its vested fishing rights in the Columbia River.

The United States, in its treaty with the Yakima Tribe of June 9, 1855 (12 Stat. 951), guaranteed these fishing rights to the Yakima Tribe in the following language:

"The exclusive right of taking fish in all the streams, where running through or bordering said reservation, is further secured to said confederated Indians, as also

the right of taking fish at all usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing them; * * *."

As early as the year 1886 the United States, through the Indian agent, for several members of the Yakima Tribe and for the Yakima Tribe, instituted an action in the Territorial courts of Washington against Frank Taylor to enjoin him from interfering with their enjoyment of their Tum Water fisheries in the Columbia River near The Dalles, Oreg. The Supreme Court of the State of Washington on January 25, 1887, ordered an injunction issued against the defendant restraining him from interfering in any manner with the enjoyment of these rights by the Yakimas, and directing him to remove obstructions which were preventing the free exercise of these fishing rights (*United States* v. *Taylor*, 13 Pac. 333).

The Supreme Court of the United States on May 15, 1905, clearly defined the fishing rights possessed by the Yakima Tribe in the case of the *United States* v. *Winans* (198 U. S. 371, 49 L. Ed. 1089), and enjoined the defendant from obstructing the fishing locations of the Yakima Indians located in the Columbia River near The Dalles, Oreg. The opinion written by Mr. Justice McKenna is the leading authority on the question of Indian reserved fishing rights before and after the execution of Indian treaties. At the outset of the opinion the Court stated:

"At the time the treaty was made the fishing places were part of the Indian country, subject to the occupancy of the Indians, with all the rights such occupancy gave."

Winans contended, however, that the Indians acquired, by article 3 of the treaty, only such rights as other citizens who might fish there in common with the Indians, and, therefore, the Indians could be excluded from trespassing. The Court answered by saying that the same result as that would occur if there were no treaties at all, and that such a result would surely be an impotent outcome to negotiations and the convention which seemed to promise more. Thereupon, the Court proceeded to set out the following:

"The right to resort to the fishing places in controversy was a part of larger rights possessed by the Indians, upon the exercise of which there was not a shadow of impediment, and which were not much less necessary to the existence of the Indians than the atmosphere they breathed. New conditions came into existence, to which those rights had to be accommodated.

"Only a limitation of them, however, was necessary and intended, not a taking away. In other words, the treaty was not a grant of rights to the Indians, but a grant of rights from them—a reservation of those not granted. And the form of the instrument and its language was adapted to that purpose. Reservations were not of particular parcels of land, and could not be expressed in deeds, as dealings between private individuals. The reservations were in large areas of territory, and the negotiations were with the tribe. They reserved rights, however, to every individual Indian, as though named therein. They imposed a servitude upon every piece of land as though described therein. There was an exclusive right of fishing reserved within certain boundaries. There was a right outside of those boundaries reserved 'in common with citizens of the territory.' As a mere right, it was not exclusive in the Indians. Citizens might share it, but the Indians were secured in its enjoyment by a special provision of means for its exercise. They were given 'the right of taking fish at all usual and accustomed places,' and the right of 'erecting temporary buildings for curing them.' The contingency of the future ownership of the lands, therefore, was foreseen and provided for; in other words, the Indians were given a right in the land—the right of crossing it to the river—the right to occupy it to the extent and for the purpose mentioned. No other conclusion would give effect to the treaty. And the right was intended to be continuing against the United States and its grantees as well as against the state and its grantees. * * *

"The extinguishment of the Indian title, opening the land for settlement, and preparing the way for future states, were appropriate to the objects for which the United States held the territory. And surely it was within the competency of the nation to secure to the Indians such a remant of the great rights they possessed as 'taking fish at all usual and accustomed places.' Nor does it restrain the state unreasonably, if at all, in the regulation of the right. It only fixes in the land such easements as enable the right to be exercised."

Then, in the years 1917, 1928, and 1919 the United States vigorously protected the property rights of the Yakima Tribe in their fishing locations on the Oregon side of the Columbia River off Celilo, Oreg., in the famous case of *Seufert Bros. Co.* v. *United States* (249 U. S. 194, 63 L. ed. 555). The Supreme Court of the United States, in its opinion of March 3, 1919, stated:

"The district court found, on what was sufficient evidence, that the Indians living on each side of the river, ever since the treaty was negotiated, had been accustomed to cross to the other side to fish. * * * The record also shows * * * that the Yakima Indians were accustomed to resort habitually to the locations described in the decree for the purposes of fishing at the time the treaty was entered into, and that they continued to do so to the time of the taking of the evidence in the case. * * * How the Indians understood this proviso we are considering cannot be doubtful. During all the years since the treaty was signed they have been accustomed habitually to resort for fishing to the places to which the decree of the lower court applies. This shows clearly that their understanding of the treaty was that they had the right to resort to these fishing grounds * * * and this is the extent of the right that is secured to them by the decree we are asked to revise. * * * To restrain the Yakima Indians to fishing on the north side and shore of the river would greatly restrict the comprehensive language of the treaty and would substitute for the natural meaning of the expression used—for the meaning which it is proved the Indians, for more than 50 years derived from it—the artificial meaning which might be given to it by the law and by lawyers."

Also see *United States* v. *Seufert Bros.* (233 Fed. 579).

In the State courts of Washington the United States vigorously defended the property rights of the Yakima Tribe and its members in their fishing activities at their usual and accustomed fishing locations off Celilo Falls, Oreg. (*State* v. *Towessnute*, Feb. 4, 1916, S. Ct. Wn. 154 p. 805. *State* v. *Meninock*, S. Ct. Wn. 1921, 197 Pac. 641.)

Then, on March 30, 1942, in the case of *Sampson Tulee* v. *State of Washington* (315 U. S. 681; 86 L. ed. 1115), the Supreme Court of the United States, reversing the Supreme Court of the State of Washington (109 P. 2d 280), held that the State of Washington under the Yakima Treaty of June 9, 1855, could not exact license fees from members of the Yakima Tribe fishing off Celilo Falls, Oreg., as a prerequisite to the enjoyment of fishing in the "usual and accustomed places," and that such exaction of license fees could not be reconciled with a fair construction of the Yakima Treaty of 1855.

DAMS IN THE COLUMBIA RIVER

The Yakima Tribe has been fully and constantly aware of the potential damages to its fisheries at Celilo Falls arising out of the construction and operation of dams in the Columbia River below as well as above the falls. In the year 1935, during the construction of the Bonneville Dam, the Yakima Tribe entered into an agreement with the Corps of Engineers, United States Army, Portland, Oreg., whereby the Yakima Tribe would receive compensation for their "usual and accustomed fishing places" which would be inundated by the pool created by the Bonneville Dam. This money was to be used in the construction of new fishing locations for use of members of the Yakaima Tribe. In the agreement the Yakima Tribe expressly reserved the right to recover from the United States damages which would result to their fisheries arising out of the construction and operation of the Bonneville Dam.

It is to be observed that may years passed before the officials of the Corps of Engineers in Portland, Oreg. prevailed upon the Congress to appropriate funds provided in said agreement for the construction of new fishing sites to be used by the Yakimas, and that in fact the terms of the agreement have not yet been fully met by the United States after a lapse of almost 18 years. It is, indeed, not strange that the Yakima Tribe should question the authority of officials of the Corps of Engineers to enter into any agreement with the Yakima Tribe which would guarantee it payment for the great loss the tribe will suffer when its fishing locations at Celilo are inundated in 1957 by the completion of the Dalles Dam.

The Yakima Tribe vigorously protested the construction of the McNary Dam, to no avail, and after funds had been appropriated by Congress for the beginning of the construction of McNary Dam, the Yakima Tribe instituted an action in the United States District Court for the Eastern District of Washington against the Guy F. Atkinson Co. in the year 1948 to enjoin the contractor from proceeding with the construction of the cofferdam.

THE DALLES LOCK AND DAM

The Yakima Tribe of Indians has on every occasion vigorously opposed the construction of the Dalles lock and dam on the Columbia River. On September 22, 1945, it presented oral and written protests against the construction of the

Dalles Dam before a meeting of the Army engineers at The Dalles, Oreg. On April 25, 1946, it again appeared before a meeting of the Army engineers at The Dalles, Oreg., and protested the construction of the Dalles Dam. A meeting of the War Department Board of Engineers for Rivers and Harbors was held at Gravelly Point, Va., on March 28, 1947, for the purpose of hearing a report on the proposed construction of the Dalles Dam. The Yakima Indians were unable to be present at this meeting but presented a written protest against the building of the dam. On March 18, 1950, in a general council meeting of the entire Yakima Tribe, a resolution was passed opposing the building of the Dalles Dam. This resolution was passed just prior to the approval by Congress on May 17, 1950, of the Rivers and Harbors Act, Public Law 516, which authorized the construction of the Dalles Dam.

The Yakima Indians would like to emphasize the fact that they have actively opposed the building of the Dalles Dam prior to as well as following its authorization by Congress on May 17, 1950. In other words, they have consistently and at all times opposed the construction of the dam.

On May 7, 1951, four delegates representing the Yakima Tribe of Indians in the State of Washington and the Yakima tribal attorney testified in opposition to the construction of the Dalles lock and dam and filed statements with the committee which appear in part 2 of the printed record of the hearings before this subcommittee on pages 311 to 321. Following the hearings, the report from the Committee on Appropriations contained the following statement to the Committee of the Whole House:

"The request of $18 million to initiate construction of The Dalles Dam, Oreg., is denied. This is a new project, authorized in Public Law 861 of the 81st Congress. To date no funds have been made available for the planning of this project. The committee does not feel that study of this project has sufficiently progressed for the Corps of Engineers to be able to definitely inform the Congress of the ultimate total Federal costs. In a treaty negotiated between the United States and the Yakima Tribe of Indians on June 9, 1855 (12 Stat. 951), the Indians were granted certain fishing rights on the Columbia River. These rights will be completely destroyed in direct violation of the treaty if construction of the dam is approved. Aside from the moral and legal treaty aspects, the present estimated cost of The Dalles Dam does not contemplate any payment to the Indians for their economic loss, estimated at $900,000 annually. The committee will not give further consideration to this project until the treaty matter is settled to the satisfaction of all parties concerned and until proper and final cost estimates are determined."

The Senate Appropriations Committee, however, reported The Dalles Dam item out favorably and by agreement of the conferees of the House and the Senate the appropriated item was reduced to $4 million and that amount made available in 1951 for The Dalles lock and dam project.

On February 19, 1952, delegates representing the Yakima Indians appeared before the Subcommittee of the House of Representatives on the Civil Functions, Department of the Army, Appropriations and again testified in opposition to the construction of The Dalles Dam. Their statements and testimony appear in part 2, pages 153 to 162, of the printed record of the hearings before this subcommittee in 1952.

The Army asked for $37,500,000 for The Dalles Dam in 1952 but the committee of the House again refused to recommend any funds for the dam, repeating its action of 1951, and stated that it would not recommend the appropriation of any moneys for further construction work on The Dalles lock and dam project until such time when complete cost-estimates were furnished and negotiations concluded with the Indians for the fishing sites at Celilo Falls which would be inundated by the dam.

On May 12, 1952, delegates representing the Yakima Indians appeared before the Senate Subcommittee on Civil Functions for the Army and testified in opposition to the construction of The Dalles lock and dam. Their statements and testimony appear on pages 424 to 448 in the printed record of the hearings before this subcommittee in 1952.

The Senate Committée on Civil Functions for the Army, however, recommended the full appropriation of $37,500,000 and on page 10 of the published report of this committee is found the following language:

"In recommending funds for the continuation of construction of The Dalles lock and dam the committee has considered the treaties with the Indians concerning the right to fish at their usual and accustomed places. It is the opinion of the committee that the Indians should receive just compensation for any damage resulting from the construction of The Dalles Dam. The committee notes

that the Corps of Engineers has been negotiating with the Warm Springs and Umatilla Indians since November of 1951, with a view to determining the value of the Indian fishing rights. The hearings disclose the fact that the Yakima Tribe are not interested in negotiating a settlement. The committee feels that the Corps of Engineers is actively engaged in negotiations with the Indians and that funds should be provided for the continuation of construction of this project. In this connection it should be noted that with the funds recommended ($37,500,000) the fishing sites of the Indians will not be inundated until after the fall runs in 1956."

The conferees of the Senate and House again met as they had done in 1951 and agreed upon recommending the appropriation of the sum of $20 million by the 82d Congress which to date totals the sum of $24 million appropriated for The Dalles lock and dam.

POSITION OF THE YAKIMA TRIBE IN RESPECT TO A NEGOTIATED SETTLEMENT

The Yakimas are a proud people, proud and loyal Americans. They have never been on the dole; they are a people rich in property, culture, and religion. They are patient almost beyond human understanding. They believe in God and the United States. They are jealous of their rights and insist that they be fully recognized and their treaty of June 9, 1855, faithfully observed by the United States. The Yakimas still hope and pray that the Dalles lock and dam project be stopped by this Congress and the work done thus far be removed from their river—the mighty Columbia—and the salmon allowed to pass over their great fishing places at Celilo Falls without further interference.

This deep feeling the Yakima Tribe has in respect to these fishing rights has been best expressed by two of its leaders before the United States Senate Subcommittee on Civil Functions for the Army on May 12, 1952 (printed hearings, pp. 429, 434). These statements of Alex Saluskin, chairman of the Yakima Tribal Council, and Watson Totus, member of the Yakima Tribal Council, are set out verbatim as they help to explain the position of the Yakima Tribe on this vitally important matter. Their deep conviction, based upon their religious beliefs, the close connection between the salmon and their religion, still convinces them that the Dalles Dam is a tragic mistake and opposed to the laws of God and nature.

The statement of Alex Saluskin follows (pp. 429, 431):

"Mr. SALUSKIN. Honorable Chairman and honorable members of the committee, my name is Alex Saluskin. I am chairman of the Yakima Tribal Council, Yakima Indian Tribe, Washington.

"I am thankful for this opportunity that you have given me on behalf of my people to appear and present our protest against the construction of the Dalles Dam on the Columbia River, 12 miles below our most valuable fisheries at Celilo Falls.

"FISHING RIGHTS UNDER TREATY OF 1855

"During the great treaty council meeting at Camp Walla Walla in Washington Territory in 1855, the chiefs and headmen of many different tribes listened to the offers made by Territorial Governor Isaac I. Stevens. He told the chiefs that if they agreed to the terms of the treaty, that he, Governor Isaac I. Stevens, would see to it that the Great White Father would honor the provisions of that treaty by the United States Government.

"One of the greatest concerns the chiefs had was their fisheries. Governor Isaac I. Stevens stated many times that the usual and accustomed fishing locations would be reserved to the tribes and lands of the Confederated Tribes of the Yakima Nation, and that the Great White Father would preserve and protect the agreement if they, the chiefs, would sign the treaty prepared by the representatives of the United States Government.

"The chiefs and headmen, representing many tribes who lived along the great Columbia River, understood that under the terms of the treaty the Government would protect their usual and accustomed fishing locations forever. The greatest of these fisheries was the Celilo Falls. Their understanding was that these fisheries would be used in the same way they had always been used by the Confederated Tribes of the Yakima Nation. At the time of the treaty the Government was only interested in land for the white settlers to build homes on and raise their family, crops, and stock.

"The chiefs signed the treaty and ceded a vast territory of land to the Government feeling that their greatest property, the usual and accustomed fishing places, located within the ceded territory would be reserved to them and that the United States Government would protect it forever.

"CELILO FALLS FISHERIES

"Celilo Falls fisheries was and still is the greatest and the most valuable one. Today it is threatened to be destroyed by the construction of the Dalles Dam.

"I am now asking the Congress of the United States not to appropriate any funds for the construction of the Dalles Dam.

"1. It will violate the Yakima Treaty of June 9, 1855, which was ratified by United States Senate. The same Senate you honorable gentlemen now represent. The Army engineers have held hearings at the local area. We have submitted our protests, and appeared before the hearings believing that since the Army engineers were representing the Federal Government our protests would be reviewed by Congress.

"PROTESTS MADE TO CONGRESS

"In consideration of the enabling act of 1950 to authorize the Dalles Dam, our tribe was not notified and given an opportunity to appear before Congress to present our views on the pending legislation. Congress has not arbitrarily passed the legislation, but our protests made before the hearings held by the Army engineers were never presented to Congress. If Congress had heard our protest and given us opportunity to be heard, I feel sure that the enabling act would never have passed Congress.

"We appeared before the House committee on May 7, 1951, to protest the destruction of our fisheries at Celilo Falls, and that committee heeded our protest and refused to appropriate money for the dam. However, an appropriation was made by the United States Senate, without our having had an opportunity to appear and make a protest.

"I feel confident that our treaty of 1855 will not be threatened by the construction of the Dalles Dam. The United States Government is one of the greatest nations and tells all the nations throughout the world to observe treaties and agreements with other nations.

"Will that same Nation abrogate the treaties entered into with our chiefs without the consent of the Yakima Tribe or one of the parties to that treaty?

"We have observed the agreements and treaties entered into with your representative, Gov. Isaac I. Stevens. We hope that the Government of the United State will do likewise.

"I pray to Congress, as a citizen of the United States and chairman of the Confederated Tribes of the Yakima Nation, for reconsideration of the appropriation for construction of the Dalles Dam and disapprove the request for appropriation of any funds by this 82d Congress. Our young men have served in World War I and II to protect the treaties and principles of this country and the Constitution of the United States which protects my person and my vested right. I pray that our treaty will also be honored and protected.

"Gentlemen, I would like at this time to read a statement written for submission to the committee at this hearing by the vice chairman of the general council of the Confederated Tribes and Bands of the Yakima Indian Nation.

"Senator ELLENDER. All right, proceed sir.

"Mr. SALUSKIN (reading). 'A red man speaks: I am Kiutus Jim, vice chairman of the general council of the Confederated Tribes and Bands of the Yakima Indian Nation which was formed under the treaty of June 9, 1855, with the United States Government. Many of our Indian boys are fighting and dying for the rights and treaties of foreign countries and for the protection of the rights of the people of those countries. I, myself, am a veteran of the First World War. I was gassed and wounded in that war. I have a boy now overseas in Korea and another that is reporting for the fighting forces the 19th of this month of May. I will soon have two more boys that will be ready to serve our country. I wonder for what purpose we serve when at home our treaty of June 9, 1855, is given so little consideration that the Government goes ahead and builds dams in violation of our treaty rights on the Columbia River destroying forever our fisheries. We, too, have a treaty and we believe our treaty is as valuable as the treaty rights and the rights of the peoples in other countries.'

"Mr. SALUSKIN. In addition to that, I would like to make a comment with regard to my own family. My son, William Saluskin, was wounded in Africa in the initial campaign against our enemies. He was 1 of the first 125 casualties that went to Walter Reed Hospital. Another boy named Joe Saluskin was in the Air Corps. He served in connection with guarding the Gulf of Mexico and the Panama Canal. I have another boy who served in the Marine Corps. Also my daughter served in the WAC's, the Air Corps."

The statement of Watson Totus follows (pp. 434, 435):

"Mr. TOTUS. My name is Watson Totus, member of the Yakima Tribal Council. I am a direct descendant of the Columbia River tribes and chiefs who signed the Yakima Treaty of 1855.

"I am protesting the construction of the Dalles Dam. It never should have been authorized by the United States Congress in 1950 and the 82d Congress never should have appropriated $4 million and let the contract for construction in 1952.

"DISTINCTION OF CELILO FALLS FISHERIES

"I make this statement because this proposed dam violates the Yakima Treaty and threatens to abolish and destroy one of the most historical and scenic natural monuments in the United States. The dam would do irreparable damage to Celilo Falls fisheries, tribal traditions, and religion.

"My people fished at Celilo and many other tribal fishing places, both above and below the falls. Even yet many Indians fish here to supplement their subsistence and livelihood. Many white people from all over America and many foreign countries come to our area to view our great natural monument.

"Our tribal legends are there. Up to now no one has written about them, but at various places our history is written on boulders and bluffs. These stories tell how our people caught the first salmon; of our great ceremonies; and our prayers of thanks to the Great Spirit and Maker who provided happiness and food.

"The religion of Washeat was the tribal religion. The spiritual teacher told the people that salmon was blessed by the Great Maker who made the sky, divided the waters, made the earth, and from it created man who breathed wind from the sky. The Great Maker blessed the water he drank and that which went to the animals and plantlife.

"The salmon was then made a sacred food second to water in the Yakima tribal Washeat religion. All of the tribes along the Columbia Basin worshiped in the same Washeat religion.

"Up to this day the white people call it the Pom-Pom religion and I am one of the leaders of that original religion. I teach my people that (1) water is blessed by God; (2) salmon is blessed by God, and it is the first food that we partake of in the Washeat church ceremonies on Sunday, fresh-root festivals, and first-salmon-catch festivals.

"I am now asking Congress to change its mind and not construct the Dalles Dam. It will make the spirits of my dead chief of long past rejoice and will build confidence in my present and future people that our treaties of 1855 are sacred and shall not be abrogated by Congress of the strongest and most religious country of the world, the United States of America.

"The spirits of my past chiefs cannot plead for justice. I can only pray, save Celilo Falls and all it represents. May the Great Spirit bless you all. I have spoken for my people."

The Yakima Tribe has authorized the Yakima Tribal Council to meet with the Army officials to discuss the proposed settlement. Selected delegates have met with Mr. Percy M. Othus in charge of negotiations for the Army in Portland, Oreg., and Toppenish, Wash., on several occasions. While the delegates have been fully authorized to proceed, the Yakima General Council speaking for the Yakima Tribe feels that this Congress should have a further opportunity to pass upon the Dalles Dam. The Yakimas are naturally pessimistic over the outcome and are fully aware that $24 million has already been appropriated and commitments made by the Army in excess of this sum for the Dalles lock and dam.

There has been no express direction from the Congress directing the Corps of Engineers to negotiate settlements with any of the Indian tribes who have, or claim to have, fishing rights at Celilo. Nor has the Congress directed the Corps of Engineers to make any arbitrary settlements based upon possible equitable and not legal grounds. All of these things, which have occurred in the past and are now occurring, compel the Yakima Tribe to hesitate in concluding any settlement or in proceeding further with negotiations until the Congress defines the settlement and the Yakima Tribe is assured from the highest authority that whatever settlement is concluded payment will be promptly forthcoming to the Yakima Tribe.

In addition to these doubts which the Yakima Tribe has in respect to the lack of authority in the Portland office, Corps of Engineers, to consummate such a settlement and the long delays which have already resulted in the dealings the Yakima Tribe has had with the Portland office, the Yakimas object strenuously to the methods being used by the Corps of Engineers, through Mr. Percy M. Othus, in his efforts to reach settlements with several of the tribes who claim

fishing rights at Celilo. He is endeavoring to divide up among these several tribes and the Celilo groups or bands of Indians approximately $23 million, which has been determined by the Corps of Engineers to be the present value of the fisheries at Celilo. He has already concluded agreements with the Warm Springs and Umatilla Tribes using a formula of expediency which completely ignores the legal aspects of the problem.

It is the impression of the Yakima delegates that after the Corps of Engineers has concluded settlements with all of these tribes, what is left out of the $23 million would then be available to the Yakimas. The Yakima delegates cannot and do not believe that Congress will appropriate any money for settlements made in this manner and that any payment which is made to any tribe must be based upon legal grounds.

There is no question but that the Yakima Tribe is the main party in interest in this enitre matter, if not the only tribe to which compensation should be paid, based entirely upon legal grounds and factual evidence necessary to establish aboriginal title to these fishing sites. The Yakimas feel that Mr. Othus has concentrated his efforts on the Oregon tribes with a view of forcing the Yakima Tribe to settle its claim for whatever is left of the $23 million after all of these tribes have entered into compromise agreements.

Should this Congress appropriate funds for the continuation of construction of the Dalles lock and dam and negotiations for settlement be reopened between the Army and the Yakima Tribe, the Yakimas have certain deep-rooted convictions which they will insist be recognized by the United States in any settlement. The Yakima delegates will insist:

1. That no settlement be made with any tribe without positive proof of aboriginal title to the fishing locations off Celilo, Oreg.
2. That no settlement be made which is based upon the population of any tribe or for any other arbitrary or expedient reason.
3. That no settlement be made with any tribe without positive evidence that the fishing locations in question have been used and occupied since time immemorial continuously to and including the present and have never been ceded away, relinquished or abandoned.

CONTENTIONS OF THE YAKIMA TRIBE

The Yakima Tribe contends:

1. The Yakima and Warm Springs are the only tribes whose members have fished continuously at Celilo, Oreg., since time immemorial.
2. The Yakima Tribe is the only tribe which has a legal compensable interest in the fishing locations at Celilo, Oreg.
3. The Warm Springs Tribe ceded away their fishing rights at Celilo, Oreg. to the United States under the Huntington Treaty of November 15, 1865 (14 Stat. 751; II Kappler, Indian Laws and Treaties, 908), and should have no interest in any settlement for damages resulting out of the construction of the Dalles lock and dam.
4. Whatever, if any, other tribes occupied fishing locations at Celilo, Oreg. prior to and after the year 1855, such tribes have relinquished and abandoned in a large part, if not completely, their fishing rights.

Historical evidence of the Indian use and occupancy of their usual and accustomed fishing locations in the vicinity of Celilo Falls on the Columbia River.

The first recordations of Indians fishing at Celilo Falls in the Columbia River is found in the Journals of Lewis and Clark Expedition in the years 1804 and 1806.

The Indians residing across from the falls were given the name of Eneeshurs by Lewis and Clark. These Indians were described as residing at and above the Great Falls (Celilo) of the Columbia (the Expedition of Lewis and Clark, Hosmer, vol. II; note 2, p. 147 of the Original Journals of the Lewis and Clark Expedition, 1804–06, vol. III, pt. II). They are also designated upon a map of the Great Falls incorporated in the Lewis and Clark Journals (Original Journals of the Lewis and Clark Expedition, 1804–06, vol. III, pt. II, opposite p. 148). These Indians are described as follows in the 14th Annual Report of the Bureau of Ethnology, part 2, page 740:

"Tapanash or Eneeshur (Shahaptian stock), a small tribe speaking the Tenino language, having a village on the north bank of the Columbia in Klickitat County, Wash., about opposite the mouth of the Des Chutes river and a little above Celilo. The name is identical with the Eneeshur of Lewis and Clark, these explorers in 1805 having also included under this name the various bands speaking Teninon languag› on both sides of the Columbia about the mouth of the Des Chutes.

The Tapanash have no recognition (14th Annual Report, Bureau of Ethnology, pt. 2, p. 740)."

As of 1805 the Yakimas had undisputed control of both sides of the Columbia River near Celilo. The Expedition of Lewis and Clark, by Hosmer, volume II, at page 502, describes the Yakimas as follows:

"Eneeshur Nation reside at the upper part of the Great Narrows of the Columbia on either side, are stationary."

The near neighbors of the Eneeshurs, or the band of Indians residing directly west of them on the northern side of the Columbia were the Skinpah Indians. This band was a named party to the Yakima Treaty of 1855 and is described in the 14th Annual Report of the Bureau of Ethnology, part 2, page 740, as follows:

"Skinpa (Shahaptian stock) synonyms: Skien, Skin, Skinpah. A small tribe speaking the Tenino language formerly having a village on the north bank of the Columbia in Klickitat County, Wyo., at the falls opposite Celilo. They took part in the Yakima Treaty of 1855 under the name of Skinpah, and are now incorporated with the other tribes on Yakima reservation. The name is Tenino and means cradle place."

It should be noted that both bands spoke the same language and lived next to each other. It is only logic, therefore, to assume that the Eneeshurs, referred to by Lewis and Clark, became incorporated in one of the Confederated Tribes and bands of the Yakimas.

In the report of George Gibbs to Captain McClellan on the Indian Tribes of the Territory of Washington, submitted on March 4, 1854, the Yakima fisheries near The Dalles, Oreg., are mentioned. Certain portions of this report found in Executive Document No. 78 of the 33d Congress, 2d session, contained in volume I of the publication are hereafter quoted:

Pages 407 and 408:

"The Yakimas occupy the country drained by the river of that name. They are divided into two principal bands, each made up of a number of villages, and very closely connected; the one owning the country on the Nahcheas and lower Yakima, the other upon the Wenass and main branch above the forks."

"The country around the northern or main branch of the Yakima is frequently called by them Pschwan-wapp-am, or the stony ground, and the Indians living there sometimes assume the name to themselves. Besides the fisheries at The Dalles, the Yakimas have others in their river, up which the salmon run without interruption far into the mountains."

Page 423:

"The subject of the right of fishery, in its present position, is believed to be one concerning which difficulties may arise. It is certain that the intention of Congress never was that the Indians should be excluded from them; but as no condition to this effect was inserted in the donation act, the question has been stated whether persons taking claims, including such fisheries, do not possess the right of monopolizing them. It is, therefore, proper that this also should be set at rest by law."

The United States was well aware of these valuable fishing locations of the Confederated Tribes of the Yakima Nation near Celilo, Oreg. At the council leading up to the Yakima Treaty of June 9, 1855, held in the Walla Walla Valley, Governor Stevens, the negotiating agent for the United States, told the headmen and chiefs of the Yakima Tribe:

"In the paper for the Yakimas we have included the tribes who acknowledged Kam-i-ah-kan for their head chief. The Piscouse, the Swan-wap-um and Palouse, the Yakimas, and all the bands on the Columbia below the Walla Walla down to the White Salmon River. They have their reservation and fishing stations, which they well know and which I understand is satisfactory. You will not be called according to the paper to move on the reservation for 2 or 3 years; then is secured to you your right to fish, to get roots and berries and to kill game; then your payments are secured to you as agreed; then your schools, your shops, and physicians and other things we have promised are secured; then the salaries, the houses, and the 10-acre farms of your chiefs are secured to him."

THE TUMWATER FISHERIES OF THE YAKIMA TRIBE

Soon after the treaties were consummated between the United States and the Yakima Tribe and the Indians of several other tribes located along the Columbia River in 1855, the whites commenced invading the Indian fisheries used since time immemorial by the Yakimas and Warm Springs demanding that all of the Indians who used these fisheries be removed to the Yakima Indian Reservation

and the Warm Springs Indian Reservation established by the treaties of June 9, 1855 (12 Stat. 951) and June 25, 1855 (12 Stat. 963).

On November 14, 1881 the Commissioner of Indian Affairs wrote the United States Indian Agent (Records of the Bureau of Indian Affairs (RG 75) Letters sent: Land Division Letter Book 87):

"SIR: Referring to your letter of the 23rd May last, enclosing report of Mr. Fairchild, Agency Clerk, relative to his investigations under your instructions into alleged troubles existing between the Indians and white citizens, growing out of the use, in common, of the "Tumwater" fisheries near the "Dalles" of the Columbia, in Washington Territory, and also to your second letter (August 16) upon the same subject, I have to say, that the action of Mr. Taylor in leasing any interest he may have in the said fisheries, which is in fact only a common one with all other citizens of the Territory, is entirely unwarranted either in law or in equity.

"When, by treaty of June 9, 1855, the Yakima Nation ceded to the United States the lands embracing the fisheries referred to (Stats. 12 p. 951) certain privileges were reserved, and secured to the Indians; among them the following: 'The exclusive right of taking fish in all streams, where running through or bordering said reservation' (their present reservation) 'as also the right of taking fish *at all usual and accustomed places in common with citizens of the Territory*, and of erecting temporary buildings for curing them.' "

On April 17, 1882, there had been so much interference with the use, by the Yakimas, of the famous Tumwater fisheries, the Commissioner reported the matter to the Secretary of the Interior, urging that action be taken by the United States to secure the Indians, not only in their continued use of the Tumwater fisheries, but in the rights-of-way across lands adjacent to the fisheries vital to the use of the Indians in their occupancy of the fisheries. Records of the Office of the Secretary of the Interior, Indian Division (RG 48). Letters Received: Commissioner of Indian Affairs to the Secretary, April 17, 1882.

R. H. Milroy, Superintendent of the Washington Territory in 1884 advised the Commissioner of Indian Affairs of the action taken by the United States to protect the Tumwater fisheries of the Yakimas and that a temporary injunction had been secured against the defendant, Taylor. The following quotation is taken from Executive Documents, House of Representatives, 2d session, 48th Congress, 1884–85, page 219:

"Fisheries: Fish has in time past been the main item of subsistence of the Indians of this region, and in their treaty they were careful to reserve the exclusive right to all fisheries on and adjoining their reservation, and the right of free access to all their other accustomed fisheries in common with the whites. The last-named right was invaded by a white man on the Columbia River above the Dalles a few miles, in this Territory, who fenced up and excluded the Indians from access to two of their oldest and most important fisheries. After trying in vain by reason to obtain for the Indians free access to said fisheries, I had to resort to law, and applied through the United States attorney for this Territory to the judge of the courts for this district for, and obtained, a temporary injunction till the next term of court, when it will be tried and the injunction made permanent if the treaty is regarded as the highest law of the land."

In 1887 the Commissioner of Indian Affairs reported that in view of these great difficulties between the whites and the Indians over the fisheries her had instructed that a special agent of the Indian Office, one G. W. Gordon, be sent to The Dalles of the Columbia to make a thorough study of the situation and devise a plan which would secure the Indians in the permanent use of the fisheries. The Commissioner states that the Indians have suffered a great injustice in being deprived of their food supply which they have depended upon for so many generations. The Commissioner concludes his letter by stating that under the Taylor decision the rights of the Yakima Indians in these fisheries cah no longer be denied or disputed. This report is taken from Executive Documents of the House of Representatives, 1st session, 50th Congress, 1887–88, pages 80 and 81, and is as follows:

"FISHERIES ON THE COLUMBIA RIVER, WASHINGTON TERRITORY

"Referring to the remarks in my last annual report upon the above suject, I would state that a special agent of this office, G. W. Gordon, esq., has been sent to the Dalles of the Columbia, with a view to making a thorough study of the situation, and, if possible, devising some plan whereby the Indians may be secured in the permanent use of some portion of their fisheries. That they have suffered a great injustice in being deprived of a share in the food supply which

nature has so abundantly provided there, and upon which they have depended from time immemorial, no one can truthfully deny, and it is to be hoped that some measures may be adopted whereby their former privileges at the fisheries may be restored to them perpetually.

"In a very recent report to the War Department, General John Gibbon, commanding the military department of the Columbia, called attention to the oft-repeated, and, I may say very generally credited, story of fraud in the treaty of 1865, whereby the Warm Springs Indians were, it is claimed, cheated out of their fishing privileges at the Dalles. General Gibbon thinks that, under the circumstances, Congress might be asked to appropriate a yearly sum for a term of years to be expended in the purchase of cured salmon for issue to these Indians.

"By a recent letter from W. H. White, esq., United States attorney for Washington Territory, to Agent Priestly, of the Yakima Agency, it is learned that in January last, in the case of *The United States* v. *Taylor*, the Territorial supreme court had the Yakima treaty of June 9, 1855 (12 Stat. 951), before it for construction. Taylor had taken a homestead on the banks of the river, and erected a fence, which obstructed the approaches to the fishery, and prevented the Indians from enjoying the right to take fish at one of their usual and accustomed places. The court held that the obstruction was unlawful, and, although Taylor had a patent for his land, ordered the removal of the fence. Under this decision, the rights of the Yakimas in these fisheries can no longer be denied or disputed.

Very respectfully, your obedient servant,

J. D. C. ATKINS, *Commissioner.*"

WISHRAM FISHERIES

The Wishram fisheries on the Columbia River have been one of the more important fisheries of the Yakima Tribe since time immemorial. The Wishram Tribe of Indians is described in the 14th Annual Report of the Bureau of American Ethnology, page 740, as follows:

"TLAQLUIT OR WUSHQUM (CHINOOKAN STOCK)

"Synonyms: Echebool, Echeloot, Eloot, Wisham, Wishham, Wishram * * * are the easternmost tribes of Chinookan stock on the Columbia, having immediately above them the Shahaptian Tribes, speaking the Tenino language. The Tlaquit territory lies along the north bank of the Columbia in Klickitat county, Wash., from Tenino, about 6 miles above the Dalles down to the neighborhood of White Salmon river. They call themselves Tlaqluit (Escheloot of Lewis & Clark), and are called Wushquapum or Wushwum people by the tribes speaking Tenino language, Wushwum being the name of their chief village near South Side at The Dalles, the great fishing and trading resort for the tribes of this section * * *. They took part in the Yakima Treaty of 1855 under the name of Wishham. * * *"

In 1896 Commissioner Browning reported further infringements of the fishery rights of the Yakimas by other white landowners along the Columbia River and stated that even in spite of the Taylor case previously decided, the Winans Bros., the Seufert Bros. and others were obstructing the free passage of the Indians to and from their ancient fishing sites. The Commissioner went on to report that this interference had been laid before the Department of Justice with the recommendation that the United States take action on behalf of the Indians. The Commissioner went on to state that even the State of Washington while owner of the shore lands with power to sell them could not deprive the Indians of their ancient fishing rights. The Commissioner's report is to be found at pages 98 to 100 of the report of the Secretary of the Interior communicated to the two Houses of Congress at the beginning of the 2d session of the 54th Congress.

On July 11, 1895, William H. Brinker, United States attorney, filed a bill in equity in the United States circuit court for the southern division of the district of Washington in the name of the United States on behalf of the Yakima Indians against the Winans Bros. to enjoin them from interfering with the Yakimas in taking fish at the Wishram Fishery. A temporary injunction was issued against the Winans Bros. on the same date.

The Supreme Court of the United States on May 15, 1905, clearly defined the fishing rights possessed by the Yakima Indians in the case of the *United States* v. *Winans* (198 U. S. 371, 49 L. ed. 1089), and enjoined the defendant from obstructing the fishing locations of the Yakima Indians in the Columbia River near The Dalles, Oreg. The opinion written by Mr. Justice McKenna is the leading authority on the question of Indian reserved fishing rights. The opinion of Justice McKenna is given on pages 2 and 3 of this statement.

Lone Tree or Wah-sucks Fisheries

In spite of the court decisions in the Taylor and Winans cases which gave the Yakima Indians the right of free access to and from their ancient fishing locations, there was a continued effort by the white settlers to prevent the Indians from fishing at their "usual and accustomed" places. In 1916 the Seufert Bros. prevented the Yakima Indians from fishing at the Lone Tree or Wah-sucks fisheries on the south side of the Columbia River just a few miles above The Dalles, Oreg. The Yakima Indians claimed this location as one of their "usual and accustomed" fisheries. The United States Government on behalf of the Yakimas instituted action in the district court of Oregon against the Seufert Bros. for interfering with the Yakimas at their Lone Tree fisheries (*U. S.* v. *Seufert Bros.*, 233 Fed. 579). The district court decided in favor of the Yakimas and the case was appealed to the Supreme Court of the United States. On March 3, 1919, the Supreme Court upheld the decision of the district court of Oregon. The opinion of the Supreme Court in this case is given on pages 3 and 4 of this statement.

This case of the *U. S.* v. *Seufert Bros.* is noteworthy in that the testimony given in it showed:

1. That the Yakima Indians had "usual and accustomed" fishing locations along the Oregon shores of the Columbia River from the Dalles up to and including Celilo Falls.

2. That the Oregon and Washington tribes of Indians along the Columbia River from the Dalles to Celilo Falls had mutual rights in the fishing locations along both sides of the River.

3. That at the time of the Indian treaties of 1855 there existed a state of mutual friendship and intermarriage between the Yakima and Warm Springs Indians of Oregon and Washington along the Columbia River in the region of The Dalles and Celilo, Oreg.

The record of the testimony that was given in the district court of Oregon in the case *U. S.* v. *Seufert Bros.* was bound in 2 volumes and deposited in the public library of the city of Portland, Oreg. The following quotations are taken from these volumes.

Introduction of volume 1. Part 1. *U. S.* v. *Seufert Bros.*, page 2;

Statement of the Court:

"For the counsel to state that the testimony of these Indians who comprise most of the 50 witnesses was fabricated, is a statement so apparently without foundation and without sympathy of the court, as to need but passing mention."

[Excerpts from testimony given in vol. 1 pt. 1. *U. S.* v. *Seufert Bros.*]

Page 58:

"Testimony of Amos Underwood who lives at Underwood, Wash. This town was named for him. He is 81 years old and came to The Dalles, Oreg., in 1852. Spent most of his life as boatman on the Columbia River in the vicinity of The Dalles. Operated between The Dalles and John Day River."

Page 61:

"Question. Where would they fish around the Three Mile Rapids?

"Answer. Well, as near as I can figure, it was about what they call Big Eddy.

"Question. Where were their homes? Indian homes.

"Answer. In Yakima and in all up back of The Dalles out to Warm Springs."

Page 71:

"Question. I see. Well now you knew where Celilo was didn't you?

Answer. Yes, sir.

"Question. You remember where that was?

"Answer. Yes. I have been there many times.

"Question. And on both sides of the river you saw Indians fishing?

"Answer. Yes, sir.

"Question. You did not know where they came from, whether they were Yakimas or Wascos?

"Answer. No. Well, I could say this, that I knowed some come from Simcoe.

"Question. You have seen them packing fish over to Simcoe?

"Answer. Yes."

(NOTE.—Yakima Indian Agency formerly located at Fort Simcoe.)

Page 77:

"Testimony of Tomar Handley from Warm Springs Indian Reservation. Judge of Indian Court. Born on Columbia River near Seufert Cannery site—63 years old and Wasco ancestory."

Page 82:

"Question. When did he first remember seeing Indians fish at Wah-sucks?

"Answer. From my boyhood up I have seen Indians fish there.
"Question. Did the Wasco Indians ever object to the Yakima Indians coming across to fish at Wah-sucks?
"Answer. No.
"Question. Well did the Yakimas ever object to the Wascos going over on their side?
"Answer. No.
"Question. Why did not one tribe, either the Yakimas or the Wascos, object to the other tribe fishing there?
"Answer. Well, they were friendly, and they were related through marriage."
Page 117:
"Question. Did the Yakinas fish at Wah-sucks by permission of the Wascos or by their right?
"Answer. Both by permission and by right.
"Question. One had as much right there as the other?
"Answer. Yes."
Page 122:
"Testimony of Pipeshire, Warm Springs Indian born on the De Schutes River. Age about 87 years."
Page 127:
"Question. Have you fished at any other places?
"Answer. I have fished at Celilo too when I was young.
"Question. What were the relations of the tribes that met there, as to whether or not they would dispute or have trouble among themselves?
"Answer. Never was any dispute they married back and forth.
"Question. What tribes were married back and forth?
"Answer. The Indians married over to Wash-ham and the Yakimas and the Yakimas married over to the Wascos and Celilos."
Page 197:
"Testimony of John Y. Todd. Born in 1830 in Missouri and came to The Dalles in 1852."
Page 198:
"Question. How long did you stay there then?
"Answer. I lived out on a ranch. I stayed there about from 1856, I think I moved to the Tygh Valley in 1858.
"Question. What was your business?
"Answer. I was in the cattle business.
"Question. Where did you camp?
"Answer. Well, the first ranch I had was up there by Celilo.
"Question. I am speaking of when you camped, now Mr. Todd. Where did you camp?
"Answer. Well that was nothing but a camp. I built cattle corrals and we would stretch a tent, you know. Then I made a farm right there and lived."
Page 201:
"Question. Do you know what the relation of the Indians on either side of the river was with each other?
"Answer. Do you mean for friendship?
"Question. Yes.
"Answer. I know of no trouble at all.
"Question. Did you ever see any Indians, any other Indians from out the Simcoe country?
"Answer. Yes.
"Question. How did you know that?
"Answer. Well, I would ask them where their country was, and they would answer me 'Simcoe you know.' That is about all I know. I would see they were strange Indians; a few times asked them, Yakimas, Klickitats, and so on."
Page 205:
"Question. You don't remember any particular place on the Oregon side where you saw any Indians fishing?
"Answer. Yes; I do.
"Question. Where was it?
"Answer. Fishing all the way along from The Dalles right up to Celilo.
"Question. The main fishery was up at Celilo, wasn't it?
"Answer. Well, the main fishery, yes Celilo and this here Big Eddy."
Page 208:
"Testimony of J. C. Lucky, born in Iowa in 1842 and came to The Dalles in 1867. Warm Springs Indian agent from 1867 to 1870."
Page 211:

"Question. During your administration on the Warm Springs Reservation, did you ever find Yakimas visiting at Warm Springs?

"Answer. Oh sure.

"Question. And each time you speak of were the relations always friendly?

"Answer. Friendly as far as I know, I never heard any friction acknowledged."

Page 217:

"Testimony of Lorens P. Jensen, a white man, who lived at The Dalles from 1874 to 1898 and operated the ferry at The Dalles all the period.

"Question. During your ferry business at The Dalles who were your passengers?

"Answer. Well, they were all kinds, and first from 1875 to about 1878–79; I should judge that about one-third of our business was really Indian business.

"Question. Who were those Indians?

"Answer. Well, they were both Klickitats, Yakimas, and Warm Springs.

"Question. How about fish?

"Answer. Well, they would sometimes come over early in the spring and bring back fish to the Washington side. Fish was usually caught the earliest over on The Dalles side.

"Question. Have you seen them carrying them otherwise?

"Answer. Well, no, yes, I have seen them carry them otherwise. I have seen them carry them in the summertime dried on their horses.

"Question. It would not be half a fish?

"Answer. No. It would be pieces of fish but the pieces would be packed up. You could smell them a great better than you could see them."

[Vol. 1, pt. 2]

Page 351:

"Testimony of J. H. Jackson a white man born in Missouri in 1852. Came to The Dalles in 1868 and went into the cattle business at The Dalles in 1871.

"Question. What was your business up there?

"Answer. I was handling cattle from the Yakima.

Page 352:

"Question. Where did you take the cattle to?

"Answer. I took them to The Dalles.

"Question. How would you drive those cattle from the Yakima to The Dalles?

"Answer. Overland.

"Question. In what years did you drive these cattle down?

"Answer. In the spring of 1871.

"Question. During the spring of 1871 did you see any Indians coming from the Yakima down to the Columbia and back?

"Answer. Yes, sir.

"Question. Do you know whether or not they ever took any salmon back and forth?

"Answer. Back and forth, it was supposed to look, the packs, to be salmon. Dried salmon, they had packhorses.

"Question. Which way were they taking the dried salmon?

"Answer. Taking them back to Simcoe, to the reservation."

Page 355:

"Question. You observed other places on the river, did you?

"Answer. Yes, I seen other places where they fished. They fished up farther, at Evans Fishery, and they fished up at what they call Tumwater, the falls up there towards Celilo. They was fishing there and at different points along the river.

"Question. What caused you to observe these places?

"Answer. Because I was passing them.

"Question. Why were you passing them?

"Answer. Because the cattle that I brought from the Yakima and turned over between Ten Mile and the De Schutes naturally drifted back along the Columbia River in the summer o 1871 and I naturally had to go along the river to look up my cattle.

"Question. You spoke of the Yakimas coming down from Simcoe. Where would they stay and what would they do so far as you know?

"Answer. Well the main body of them, they seemed to have established a camp that summer, the summer of 1871, during the fishing season and couse digging. Their main camp was over on the swale on the Klickitat side of the Columbia across the hill there; their main camp was there. And every day there would be a gang of them would come down and cross the ferry. I know very well, remember distinctly, that I used to have to wait sometimes, when a band of Indians with packhorses [p. 356] would be there ahead of me, I would have to wait until that

load would get over. They would go over the river on the Oregon side and go off up the river. Where they went I don't know. During the fishing season they would be there for a month perhaps.

"Question. Have you ever seen the Indians crossing the river other places than the ferry?

"Answer. Yes.

"Question. Where?

"Answer. Up the river there, I think about, I have seen them frequently in canoes below Celilo crossing before the falls there in canoes."

Page 358:

"Question. You think you remember in 1871 of seeing a bunch of Indians come down there who said they were Yakimas?

"Answer. They said there were Simcoe Indians off the reservation. There was quite a big lot of them. Oh, I suppose there were 400 or 500 of them.

"Question. How many?

"Answer. Four or five hundred Indians. But they camped over on the Klickitat swale. That was their main camp."

Special Indian Agent George W. Gordon, whose post of duty was The Dalles, Oreg., was instructed by the Commissioner of Indian Affairs by letter dated August 25, 1888 and September 29, 1888 to make a complete investigation of all Indian fisheries in the northwest reserve to the several Indian tribes under their treaties, most of which were concluded in the year 1855. The special agent was instructed to ascertain what fisheries had been occupied since time immemorial by these several tribes of Indians, what fisheries were now being occupied by these several tribes, what their needs were, and what could be done to solve the fishing problems of several of these tribes by the acquisition of new fisheries where white encroachments were causing serious trouble. Letter from the Secretary of the Interior to the Commissioner of Indian Affairs, dated June 1, 1888, found in the Records of the Bureau of Indian Affairs, RG. 75 Letters Received 1888 Land 14294, reads as follows on this subject:

"In compliance with your recommendation in communication of the 24th ultimo, in the matter of fishing privileges of Indians on the Columbia River guaranteed to them by treaty, the Commissioner of the General Land Office was directed by letter of the 25th ultimo. to instruct the land officers at Vancouver, W. T., by telegraph and by mail to refuse all entries attempted to be made by white men in Township 2, N. Ranges 13, 14 and 15, East in Klickitat County, Washington Territory, until further orders from the Department.

"In this connection your attention is invited to the fact that provisions similar to those referred to in Article III of the treaty with the Yakima Indians of January 9, 1855 (12 Stat. 953) securing to them the right of taking fish at all usual and accustomed places, in common with citizens of the Territory, and of erecting temporary buildings for curing them, are contained in treaties with the following named Indians:—

S'Klallams Indians—see Art. 4, treaty Jan. 26, 1855,—12 Stat. 934;
Makah Indians—see Art. 4. treaty Jan. 31, 1855—12 Stat. 940;
Walla Walla Indians—see Art. 1, treaty June 9, 1855—12 Stat. 946;
Nez Perce Indians—see Art. 3, treaty June 11, 1855—12 Stat. 958;
Indians in Middle Oregon—see Art. 1, treaty June 25, 1855—12 Stat. 964;
Quinaielt Indians—see Art. 3, treaty July 1, 1855 and Jan. 25 '56, 12 Stat. 972.
Flathead Indians—see Art. 3, treaty July 16, 1855—12 Stat. 976.

"You will please instruct Special Agent Gordon of the Indian Service, who is now engaged under your directions in the immediate locality indicated in the treaties mentioned, to make a thorough investigation of the whole subject of the fishing privileges thus guaranteed to the Indians in the northwest; visit the usual and accustomed fishing places along the rivers, streams, lakes, etc. within the limits of the territory covered by the respective treaties containing the guarantee of security in the enjoyment of such privileges; ascertain and designate the extent of ground usually and necessarily occupied at each of such places for fishing purposes, describing each tract by the legal subdivisions where they are within surveyed lands, and by such definite description of area and of natural boundaries, where not surveyed, as will enable the Department to fully understand the matter. Also to ascertain and report whether and to what extent these tracts of land located along and bordering on the rivers, streams, lakes, etc. and occupied as the usual and accustomed fishing places, have been entered and are occupied by white men under the land laws of the United States, or otherwise, and whether the Indians are deprived of the rights and privileges thereon guaranteed to them by the treaties.

"The number of Indians who resort to each of the respective fishing places for fishing and curing fish, should be stated, together with any and all other information on the subject that may be deemed necessary to enable the Department to take intelligent action thereon. The Special Agent should be instructed to make this investigation with as much expedition as the subject will permit, and to present his report thereon at the earliest date practicable.

"When his report is received you will submit it to the Department with your views and recommendations thereon.

"Very respectfully,

"WM. VILAS, *Secretary.*"

2479 Ind. Div. '88.

Mr. Gordon devoted almost a year and a half to this work. He not only visited all of the reservations and examined the fishing locations then being used, but discussed the matter with all of the old Indians and old settlers in the localities. He furnished the Commissioner, in his amazing report transmitted January 12, 1889, with either accurate legal or geographical descriptions of the usual and accustomed fishing stations of all of the tribes of Indians in the Northwest. He advised what fisheries had been abandoned, what fisheries had been seized by the whites and what fisheries were actually being used at that time by these various tribes.

His report is, without question, the most reliable information which can be obtained regarding the use and occupancy of these fisheries since time immemorial by the various tribes. He was a Government agent acting under specific instructions from the Department of the Interior with a specific job to do. He submitted, in effect, two reports showing the location of the fisheries in which we are interested off Celilo, Oreg. In his first report of January 12, 1889, he recommended the purchase of certain lands by the United States for the use of several of these tribes of Indians whose old and accustomed fishing stations had been encroached upon to such an extent by the whites that in his judgment he felt new locations should be purchased to avoid serious difficulties with the whites.

In this report of January 12, 1889, he very clearly reviews in detail the history of the Warm Springs fisheries and discusses in detail the reasons for the Warm Springs Tribe ceding their fisheries to the United States in 1865 under the Huntington Treaty. Quoted below is that portion of the report commencing on page 10 thereof:

". . . And although I have made the foregoing recommendation to purchase a fishery for the Indians of the Warm Springs Reservation upon its principle of abstract justice to them, I feel constrained to say that the expediency of doing so is very questionable. I therefore beg leave to submit some other questions in this connection for the information and consideration of the Department. And the most important of which are those presented to me in a communication from D. W. Butler, Agent, at the Warm Springs Reservation, dated January 5th, 1888 (9) and herewith forwarded. I suppose that Agent Butler learned that I was negotiating for a fishery for the Indians under his charge, pursuant to the purpose of the appropriation of the $3,000.00 to which he refers, and hence his letter to me on the subject.

"There seems to me to be much force in the reasons presented by Agent Butler why a fishery should not be purchased and why the fund appropriated therefor should be applied to the development of their farming interests. As will be seen from his letter, he states, in substance,

"1st. That it will be very damaging to their crops and to their stock to allow these Indians to absent themselves from the Reservation during the fishing season, at the very time when their presence and labor are most needed at home.

"2nd. That when they had entire control of all the fisheries, their condition was poor indeed, that they sold fish for rum, that their stock will be damaged by taking them to the fishery, and all the Indians will want to go to the fishery and that they will, as heretofore, get more or less whiskey while there.

"Third. That during the two seasons of 1887 and 1888, they were not permitted to fish and that they remained at home and worked better than ever before and that they are now better prepared for the winter and their stock in better condition than ever before, that they have made good progress and have many homes and that if the money appropriated for the purpose of the fishery (which he deems a curse instead of a blessing to them) could be divested to the construction of an irrigating canal through lands on a certain portion of the reservation—including an area of about 8 miles wide and 16 miles long (81.920 acres)—it would be infinitely more beneficial to the Indians. The reclamation and cultivation of even one-fourth of this amount of land would be of great advantage to these Indians.

"Agent Butler has been a resident of this section of the country for more than a quarter of a century and has had personal opportunities for knowing and understanding the past habits and history of these Indians, and I therefore respectfully invite especial attention to article 1 of the supplemental treaty made with these Indians November 15, 1865, as follows:

"'It having become evident from experience that the provision of article 1 of the treaty of the 25th of June A. D. 1855, which permits said confederated tribes to fish, hunt, gather roots and berries, pasture stock, and erect houses on lands outside the reservation, and which have been ceded to the United States, is often abused by the Indians to the extent of continuously residing away from the reservation, and is detrimental to the interests of both Indians and whites; therefore it is hereby stipulated and agreed that all the rights enumerated in the third proviso of the first section of the before mentioned treaty of the 25th of June 1855, that is to say, the right to take fish, erect houses, hunt game, gather roots and berries, and pasture animals upon lands without the reservation set apart by the treaty aforesaid, are hereby relinquished by the confederated Indian tribes and bands of middle Oregon, parties to this treaty.'

"From which it will be seen, that the reason assigned for the supplemental treaty, was that the exercise of the fishing and other privileges guaranteed to the Indians on lands outside of the reservation by the treaty of 1855, had proved "detrimental to the interests of both Indians and whites"—thus corroborating the statements of Agent Butler that the fishing privilege exercised off of the reservation, had been an injury to the Indians and an obstacle to their progress.

"As stated in some of my previous communications upon this subject, from the best information I have been able to obtain, I am satisfied that the Indians did not intend by the supplemental treaty to surrender their fishing and other privileges guaranteed to them by the original treaty of 1855, and more than a year ago, I recommended that a fishery be purchased for them, and upon the principles of strict justice have again herein recommended it, believing that a fishery, or a more adequate compensation (in some form) than that granted them ($3,500) in the supplemental treaty, should be given them. But with all the facts now before us, the question arises, is it not for the best and ultimate welfare of these Indians to appropriate the money necessary to purchase a fishery for them, to the development of their agricultural and stockraising interests, from which a more certain and permanent source of subsistence could be secured and a better state of morals and of society established among them. I am of the opinion, if left to the choice of the Indians, they would say give them a fishery. Because, they not only like fish for food, but they like to leave home, they like to rove, they like the novelty of change, and as a rule they especially do not like to work. And if they are to be allowed to attend the fisheries with their entire tribes and their entire herds of horses as formerly, I should unhesitatingly decline to recommend that a fishery be purchased for them; as this would, in my judgment, entirely suspend if it did not reverse their agricultural progress—to say nothing of the general demoralization that would probably ensue. But as hereinbefore stated, if a fishery with a wheel is purchased for them, it would not be necessary to have but few attend the fisheries to take care of and cure the fish and that their horses could be returned to the reservation until the fish were prepared to be transported thither. But the question as to who should attend the fisheries and who should remain at home and attend to the crops and stock, is one that would probably give the agent much annoyance and inconvenience. He, the agent, in his letter herewith, says 'all will claim an equal right to go and it will be virtually an abandonment of the reserve.'

"Very respectfully, your obedient servant,

"GEO. W. GORDON,
"*Special Indian Agent.*"

In his complete report of January 19, 1889, addressed to the Commissioner of Indians Affairs he describes and accurately locates the old and accustomed fishing stations of the Yakima Warm Springs, Umatilla, Nez Perce, and numerous other tribes in the Northwest in which we are not interested.

In order to emphasize his findings as to the old and accustomed fishing locations of each tribe, the material pertaining to each tribe has been separated and quoted in detail in order that the fishing rights of each of these tribes as guaranteed by their respective treaties with the United States can be completely analyzed. At the end of each quotation has been added other historical data concerning the fisheries and the conclusions as to the aboriginal title and the compensable interest of each tribe, if any, to the fisheries off Celilo, Oreg.

Agent Gordon reports at length on the Indian fisheries on the Columbia River and its tributaries, naming and describing in detail some 20 fisheries. Twelve of this number are enumerated by Agent Gordon as being Yakima fisheries. These are as follows:

"*The Cascade Fisheries*

"These fisheries are situated on the Columbia River in Skamania County, Washington Territory, in Township 2 North, Range 7 East, beginning in Section 11 and extending down the river to the southwest corner of Section 21, a distance of about 6 miles. The fisheries, however, are not continuous on this distance of river front but are scattered along at different points. . . ."

Agent Gordon went on to state that the Indians here were having the same trouble with the whites in reaching their Cascade fisheries that they were having over the Tum Water fisheries.

At pages 3 and 4 of this report the Indians fishing at the Cascade fisheries are identified as follows:

". . . informing me at the same time, that although they were known as 'Cascade Indians' they originally belonged (and at the time of the treaty of June 9, 1855) to the Yakima Tribes or nation though not now residing upon the Yakima reservation, and that they had been accustomed from time immemorial to take fish at these fisheries . . ."

Agent Gordon goes on to describe the Cascade fisheries as one of the "usual and accustomed fishing stations" of the Yakimas at page 9 when he says:

"The Indians say that they were accustomed to take fish at these fisheries before the treaty was made and that it was one of the usual and accustomed places for taking fish at that time."

Tum Water fisheries

These fisheries are situated on the Columbia River in Klickitat County, Washington Territory, in Township No. 2 North, Ranges Nos. 13 and 14 East, Willamette meridian. The lands embracing those fisheries at that time were owned by O. D. Taylor and are the site of the trouble which resulted in the famous Taylor case. At page 13 of his report Agent Gordon recommends that certain lands bordering these fisheries be set aside for the use and benefit of the Indians entitled by treaty guaranties to use and enjoy the Tum Water fisheries, and then goes on to say:

". . . My reason for this recommendation is to secure ampler pasturage and camping grounds for the Yakima and other Indians who have been accustomed and who are entitled to take fish at these fisheries."

Island fisheries

These fisheries are located on an island in the Columbia River in the southeast portion of section No. 14, in Township 2 North, Range 14 East in Klickitat County, Washington Territory. Agent Gordon at page 23 of his report recommended that certain lands on the mainland opposite the northeast portion of the island be withdrawn from sale and settlement for the use and benefit of the Indians in connection with their enjoyment of their rights at the island fisheries, and went on to say in describing these lands:

"All of said lands are now vacant as appears from the records of the land office at Vancouver, but some of the non-reservation Indians formerly of the Yakima Nation, camp and reside permanently opon some of the said sub-divisions on the main land and use the same for pasturage for their ponies."

Skin fisheries

These fisheries were also called Celilo fisheries, being nearly opposite to the main Celilo fisheries on the Oregon side of the river. On page 25, of his report, Agent Gordon describes the Indians using the skin fisheries as follows:

". . . I am informed that these are first-class dipnet fisheries and that from 300 to 500 Indians have heretofore been accustomed to resort here for fish during the fishing season, and that some of said Indians are from the Yakima reservation, some are non-reservation Indians (formerly of the Yakima tribes) residing in Klickitat County Washington Territory, some are from the Warm Springs reservation in Oregon and some are the non-reservation Indians (formerly of the Warm Springs Tribes) residing in Wasco County, Oregon on the opposite side of the Columbia River. From 50 to 75 Indians reside permanently at said fisheries on the five to six acres mentioned in lot No. 4 section 18, Township No. 2 North, Range 15 East the same being University lands as aforesaid.

Tame Musqua Fishery

Agent Gordon describes this as a "third-class dipnet fishery on the Columbia River in section 12 and 13, township 2 north, range 15 east." He states that the lands abutting or embracing these fisheries are owned by Indians. Then he goes on to say the Indians who fish here are—

"* * * chiefly the non-reservation Indians in Klickitat County, W. T., and Wasco County, Oregon. They have never been deprived by the whites of the right or privilege of fishing here. They belonged originally to the Yakima and Warm Springs tribes, with whom treaties were made guaranteeing them the right to take fish at all the usual and accustomed places."

Wat-Tince or Chamberlain Flat Fisheries

These fisheries are located on the Columbia River beginning in lot 3 section 29 and extending to the east boundary line of lot 1 in section 13, township 3 north, range 17 east in Klickitat County, Washington Territory. Agent Gordon goes on to state that the whites have fenced up most of the lands bordering the fisheries and have prohibited the Indians from grazing their ponies upon these lands, and some whites have denied them the right to take fish on their lands, so that comparatively few Indians resort to these fisheries. Those who do use them are, as Agent Gordon states, nonreservation Indians from Klickitat County, Washington Territory, Wasco County, Oreg., and some from the Yakima Reservation.

Tom's Fishery

This fishery is located on the Columbia River in section 32, township 3 north, range 19 east in Klickitat County, Washington Territory, near the mouth of Rock Creek. Agent Gordon states that this is a fourth-class fishery and is resorted to chiefly by nonreservation Indians who have settled a short distance from there on Rock Creek.

It should be noted here that even though the Indians referred to are described as "nonreservation Indians residing in Klickitat County, Washington" they would undoubtedly today be considered to be Yakimas. The Fourteenth Annual Report of the Bureau of Ethnology, at page 738, reads as follows:

"Klukatat (Shahaptian stock) synonyms: Clickahut, Clickitat, Klikatat. . . . They joined in the Yakima Treaty of 1855 and are now chiefly on Yakima Reservations. . . ."

Jackson Fishery

This fishery is situated on the Columbia River in section 34, township 3 north, range 19 east in Klickitat County, Washington Territory. Agent Gordon reports that it is a third-class fishery and it is resorted to chiefly by the nonreservation Indians living on Rock Creek.

Hom-Ne-Yah or Pine Creek Fishery

This fishery is situated on the Columbia River at and near the mouth of Pine Creek in section 16, township 3 north, range 21 east in Klickitat County, Washington Territory. Agent Gordon states this is a fourth-class fishery whose use by the Indians has not been interfered with by the whites.

Tah-Wash Fishery

This fishery is located on the Columbia River in lots 1 and 2, section 30, township 3 north, range 20 east in Klickitat County, Washington Territory, Agent Gordon reports as follows on this fishery:

"It is a third-class dip-net fishery and is located on the private lands of James Woods, white, who owns the said two lots mentioned and also the lands lying north of them. The nonreservation Indians in Klickitat County, Washington Territory, and a few from the Yakima Reservation have been accustomed heretofore to resort to this fishery but they are now practically prevented from fishing here by the whites who own the adjoining lands."

Priest Rapids Fishery

This fishery is located in sections 33 and 34 in township No. 14 north, range 23 east in Yakima County, Washington Territory. On page 37 of his report Agent Gordon recommends that certain lands be withdrawn from sale and settlement for the use and benefit of "* * * said nonreservation and Yakima Indians in connection with their enjoyment of said fishery."

The Fourteenth Annual Report of the Bureau of American Ethnology, at page 735, contains a description of the Indians residing about these rapids:

"Wanapum synonyms: Columbia River Indians, Spkulks * * * are closely connected linguistically and politically with the Yakima, Palus, and Nez Perces. * * * Their village is on the west bank of the Columbia at the foot of Priest Rapids in the Yakima country."

We-Nat-Sha Pam Fishery

This is the famous Wenatchee fishery of the Yakimas, which is referred to by Agent Gordon in his report as follows:

"In regard to this fishery specially referred to in the treaty with the Yakima Nation or tribes I deem it advisable to make a separate report forwarded herewith."

The Dalles Fishery

The first fishery on the Oregon side of the river discussed by Agent Gordon is The Dalles Fishery. In describing its location he states that "the city of The Dalles is located a short distance from them." Agent Gordon states that these are the fisheries from which the Warm Springs Indians and the nonreservation Indians, originally from the Warm Springs Reservation, were formerly accustomed to take fish. Agent Gordon then goes on to state that the whites have now almost completely excluded the Indians from fishing at this location, because they have found it such a profitable place to fish themselves, and he further states that he has no recommendations to make in regard to the reestablishment of the fishing privileges of those Indians at The Dalles Fishery. The next large fishery on the Oregon side of the Columbia discussed by Agent Gordon is the one at Celilo.

Celilo Falls Fishery

His statement on these fisheries is self-explanatory. It appears on page 29 of his report and is as follows:

"The Indians of the Warm Springs reservation and the non-reservation Indians originally belonging to said reservation were formerly accustomed to take fish at these fisheries but are now practically excluded from doing so by the whites and upon the same grounds upon which they were excluded from 'The Dalles' Fisheries. And what I have hereinbefore stated concerning said Indians in reference to their connection with and exclusion from 'The Dalles Fisheries' fully applies to their relationship to and exclusion from the Celilo Fisheries. I therefore have no recommendation to make in regard to these (the Celilo) fisheries."

John Day River Fishery

The next fishery on the Oregon side of the Columbia discussed by Agent Gordon is the John Day River Fishery which was located in Wasco County, Oreg. Agent Gordon reports that the Indians resorting to this fishery were chiefly the nonreservation Indians scattered along the John Day and Deschutes Rivers and also a few from the Warm Springs Reservation. Agent Gordon goes on to state that the Indians had not been prevented from the use of this fishery by the whites and, therefore, he has no recommendations to make in regard to this particular location.

Wallula Fishery

Agent Gordon now comes to those fisheries on the Columbia River which at one time belonged to the Umatilla Tribe, the first of them being the Wallula Fishery. It is to be noted that this fishery is located on the Columbia River in sections 8, 17, and 18, in township 6 north, range 31 east in Walla Walla County, Washington Territory. Agent Gordon reports that the Indians who resorted to this fishery were the nonreservation Indians originally belonging to the Umatilla Reservation and the Indians now residing on the Umatilla Reservation. He goes on to report that they have not been interfered with by the whites in the use and enjoyment of this fishery, and he recommended that certain lands be set aside for them in order to preserve this fishing right for them. A reference to any standard atlas will quickly show that these fisheries located in township 6 north, range 31 east in Walla Walla County are many miles east of the Celilo fisheries and are, in fact, located upon the Big Bend of the Columbia River east of the Umatilla River.

Palouse and Snake River Fishery

The next fishery described by Agent Gordon which might be called a Umatilla fishery is the Palouse and Snake River fishery. This fishery is located on the Snake River near the mouth of the Palouse River. Agent Gordon states that the Indians who take fish at this fishery are the nonreservation Indians who are settled on the Snake and Palouse Rivers in this vicinity and who originally belonged to the tribes now residing on the Umatilla Reservation. He reports

further that these Indians have not been interfered with in the use of this fishery by the whites and recommends that certain lands be withdrawn from sale to the general public bordering on this fishery so as to protect these Indians in their future use thereof.

The only other fishery described by Agent Gordon as being a Umatilla fishery was the Wallowa River itself, which is a tributary of the Grande Ronde which is in turn a tributary of the Snake River. Agent Gordon reports there are no natural fisheries on this river but that it is a clear shallow stream and the fish are caught with grabhooks fastened to the end of a long pole which the Indians use on horseback while riding in the stream and following the channel.

In this connection, a description of the Umatilla Tribe and its early habitat as found in the 14th Annual Report of the Bureau of American Ethnology at page 744 is interesting:

"The Umatilla (Shahaptian stock) synonym: Uilla, a tribe formerly occupying the lower portion of the river of the same name, with the adjacent bank of the Columbia in Oregon * * *. By the Treaty of 1855 they agreed to go on the Umatilla Reservation in Oregon * * *."

In summarizing the historical data available on the Umatilla Tribe and its early fishing rights one readily observes that the westernmost fishery of these Indians was along the Umatilla River, which itself is many miles upstream from the famous Celilo fishery. The most important fishery of the Umatilla Tribe as described by Agent Gordon was the Wallula fishery located on the Big Bend of the Columbia, which is even farther east or farther upstream than the Umatilla River itself. There is a complete absence of any evidence of fishing rights of these Indians at any point downstream from the confluence of the Umatilla and Columbia Rivers. In fact, all of the evidence places these Indians upstream from this point, with their fishing activities extending even up into the tributaries of the Snake River.

Agent Gordon concludes his report with a discussion of the Nez Perce fishing activities. He reports that the agent for the Nez Perce Indians informed him that these Indians chiefly resorted to the Little Salmon River and to the Salmon Meadows to take fish. On pages 42 to 44 of his report Agent Gordon states:

"* * * the fisheries on the Little Salmon river. And touching the fishing privileges of the Nez Perce Indians, I remark that they have no natural or fixed fisheries any further than that they fish on this stream from its confluence with the Big Salmon to the Salmon Falls, a distance between 25 and 30 miles" (p. 42).

"* * * The Indians of the Nez Perce reservation also fish extensively on the Wallowa river in Eastern Oregon. In making my investigations I visited this stream also, and followed it for a distance of about 40 miles the distance along which the Indians are accustomed to fish. There are no natural or fixed fisheries on this stream, which is shallow and limpid. The fish are easily seen and are caught with grab-hooks from along the banks or from horse-back while riding in the midst of the stream—the hook being fixed to the end of a long pole or rod. The Indians from the Umatilla reservation also fish in this stream * * *" (p. 43).

"In regard to the fishing privileges guaranteed by treaty to these (Nez Perce) Indians, I have no recommendations to make, inasmuch as they have no natural or local fisheries further than upon the Little Salmon River for a distance of about thirty miles and upon the Wallowa River for a distance of about forty miles" * * * (p. 44).

The Yakima Indians have never relinquished their treaty rights to their "usual and accustomed" fishing locations on the Columbia River and at the present time represent the majority of the Indians fishing in the vicinity of Celilo Falls. A study of the tribal designation and number of Indians fishing in the Celilo Falls area from 1947 to 1951 by F. A. Davidson, Yakima tribal biologist, showed that approximately 65 percent of them were Yakima Indians. This study also determined that approximately 75 percent of the total annual catches of salmon and steelhead made by the Indians in this area from 1947 to 1951 was made by the Yakima Indians. Therefore, the Yakimas, as of early days, still retain the controlling interest in the fisheries in the Celilo Falls area of the Columbia River.

SUMMARY

The early historical data and scientific material available on the fisheries of the Middle Columbia River and their use and occupancy by the Indian tribes living in close proximity thereto readily lends itself to the following brief summary:

1. As early as 1805 when Lewis and Clark first contacted the Indians along the Columbia, the Yakimas and their confederated tribes and bands were well in-

trenched and established in nearly all of the well-known fisheries along the Washington, or northern side, of the Columbia. As of that early date the Yakimas were also on both sides of the Columbia River at what was then called The Great Narrows of the Columbia, and is now known as the vicinity around Celilo Falls.

2. * * * At the time of the Indian treaties in 1855 the dominant Indians tribes occupying the fisheries at The Dalles and Celilo Falls on the Oregon side of the Columbia River were the Yakima and Warm Springs Tribes. Some 10 years after the execution of the Warm Springs Treaty in 1855 this tribe, by treaty of 1865, ceded all of its rights to its "usual and accustomed" fishing locations, at The Dalles and Celilo Falls, to the United States.

3. * * * By the year 1889 white encroachment upon the ancient fishing locations of the Indians along the Middle Columbia River had become so severe that a special investigator (G. W. Gordon of the Indian Office) was appointed to study the problem. His studies and investigations clearly showed the Yakima Tribe to be the one which had the dominant interest in the fisheries of the Middle Columbia River. It was the only tribe whose bands had used and occupied the fisheries in the vicinity of Celilo Falls continuously since time immemorial and had not ceded its property rights to these fisheries to the United States.

4. * * * The United States has continuously through litigation protected the Yakima Indians in their fishing rights on the Columbia River and that the decisions of the courts in these cases down through the years have clearly held that the Yakimas did not cede or relinquish any of their rights to fish at their "usual and accustomed" fishing stations on the Columbia River.

5. * * * The original fishing activities of the Umatilla Tribe of Indians were confined to locations along the Columbia River upstream from the Umatilla River and extending into the tributaries of the Snake River. There is no evidence of any ancient Umatilla fisheries along the Columbia River below the mouth of the Umatilla River.

6. * * * The Nez Perce Tribe of Indians originally confined its fishing activities along the Salmon and Wallowa Rivers and the tributaries thereto. There is no evidence of any ancient fishing sites of these Indians along the main stem of the Columbia River.

7. * * * The Yakima Tribe of Indians is the only tribe that has compensable fishing property rights in the vicinity of Celilo Falls on the Columbia River that will be destroyed by the construction of The Dalles lock and dam.

8. * * * The Yakima Indians still retain the controlling interest in the fisheries in the vicinity of Celilo Falls on the Columbia River. At the present time 65 percent of the Indians fishing in this area are Yakimas and 75 percent of the total annual catches of fish made by all the Indians is made by the Yakimas.

It is, therefore, urged and maintained that the Yakima Tribe is the only tribe of Indians to this day in which legal title to the Celilo fisheries still remains. That the Yakima Tribe is the only tribe which can produce any evidence of legal title in the Celilo fisheries, based upon continuous use and occupancy since time immemorial.

Respectfully submitted.

THE YAKIMA TRIBE OF INDIANS,
By and Through THE YAKIMA TRIBAL COUNCIL,
By ALEX SALUSKIN, *Chairman*.

LEGAL RIGHT

Senator DWORSHAK. May I understand that you are contending that the Yakima Tribe has sole and exclusive rights at Celilo?

Mr. NIEBELL. The legal rights.

Senator DWORSHAK. Proprietary rights?

Mr. NIEBELL. Yes.

Senator DWORSHAK. No other tribe should participate in any financial settlement made with the Government?

Mr. NIEBELL. We do not say that. We say the Warm Springs had the same right, but they by treaty in 1865 ceded their rights. The Yakima Tribe and the Warm Springs Indians were the only traditional owners of that site. In the old days all of these other tribes had salmon on their reservations. They could go out and get salmon in

any of the streams bordering their reservations, and did not have to travel hundreds of miles to Celilo Falls to catch salmon.

When the fish began to get scarce from 1870 to 1890, when the commercial fishing began to develop in the lower Columbia River, then the others came down upon this site. That is the situation.

Senator KNOWLAND. We are going to operate under the 5 minute rule here.

Mr. NIEBELL. We will ask to have their statements made a part of the record when they are not read.

YAKIMA INDIAN AGENCY, TOPPENISH, WASH.

STATEMENT OF WILSON CHARLEY, MEMBER OF THE YAKIMA NATION

GENERAL STATEMENT

Mr. CHARLEY. My name is Wilson Charley, member of the Yakima Nation. I will try in my best ability to put my problem before you gentlemen, in a borrowed language. I am still not educated to a high degree. As it is said to the man of old, "Thou shall not swear falsely, but shall perform, what was sworn in the eyes of the Lord thy God." I was elected in July 1947, a member of the Yakima Tribal Council, and sworn under oath that I would uphold and defend the treaty of the Yakima Nation and perform my duty in presence of Almighty God.

The word was sent out that a treaty was to be made with the people of the West. When the time was near our people gathered and selected chiefs, chiefs of red man, and delegates, and these chiefs and delegates went to the treaty grounds, and when the meeting started they were told that the treaty would be within the tribe's own jurisdiction. And when the meeting started the people were told we have gifts and provisions. The chiefs said we have plenty of our own that we brought with us, that has been the white man's way always using gifts and provisions to sway the people. The records will show that the intent of the treaty of the Yakima Nation was to be founded on statutes of Almighty God. After our people were created and put on earth, He also place unto them unwritten religion and commandments.

Our people sustain in the treaty of June 9, 1855, water, fish, game, roots, and berries.

Now we go on making of treaty, Governor Stevens and General Palmer told the red men on what condition the treaty would be founded on, and it was also said that.

TREATY RESPONSIBILITY

As I said before, to the best of my ability some of the words I put down and you will notice that the responsibility was all put on the White Father by Governor Stevens, in protection of property rights and title within each tribe's jurisdiction. In other words, to cut it short that when Governor Stevens, begin to see that now the tribes are ready to sign the agreement, he then talked in another language. The record will show you since that time the tribes that agreed and

signed the treaty that Governor Stevens and General Palmer purpose and the red men signed, those tribes now have no more fishing and hunting rights, and many other things they do not have, that treaty or word of Governor Stevens does not hold up as he told the red men at the time. That much on that because you know what happen—the laws have been made and passed into law by this Government.

Now we go back to the 14 chiefs of the Yakima Nation who signed the treaty in the presence of Almighty God. As was said before, you also know from old reports made by Governor Stevens from time to time. While the treaty was going on the chiefs of all tribes and their delegates would meet by themselves and would talk over the problems or explanations told at the official meeting with Governor Stevens and General Palmer, where our chiefs try to convince the other tribes what will happen if they sign the white man's paper in other words his wording. Our chiefs said, "Let us use the statutes of Almighty God as a foundation of our land, build it with God's stones, so that it may be strong." When they met by themselves and finally it was settled that the other tribes were ready to sign, and they signed, now they have no more rights.

Now we go back to our chiefs who said and tried to tell other tribes, Members of the House and Senate, I want you to tell me and explain, Matthew 8, 24th verse, that is yours.

Now, our chief said when Almighty God put the red men of the Yakima Nation he gave unto us unwritten religion, unwritten commandments. It is true that it takes men of good sense and conscience to present his case before the eyes of Almighty God.

TREATY PROVISIONS

Our chiefs and headmen and delegates of Yakima Nation, for whom our Chief Kamaiakum spoke, this is the kind of treaty I want, He sustains the gardens, He sustains the life, body, and soul, and He sustains the unwritten commandments of water, fish, game, roots, and berries. He said as long as there is water which gives me life and strength so that I may provide preservation of the human race, He said as long as there are food as mentioned above and people to obey those unwritten commandments, my land shall be built on the stones of God. He said there are laws coming like the wind and there are laws that will fall like the rain. He said my people, if we obey and hear those words of His and do them, our land shall not fall where we sustain life, body, and soul.

Therefore, if we build our home on the statutes of God which is supreme over the man-made laws, our treaty shall not be violated or change or our property rights title be taken by force; that is why our home has stood as the word of Almighty God. We must use and benefit by what He gave unto us; if we profit by what He gave unto us, then we must be punished for we will disobey Him and break His commandments.

In other words, the red men obligated in perpetuity what was in preservation of life, body, and soul. That is why I say the Congress cannot abrogate our treaty. It must abrogate the statutes of God which is life, body, and soul of my people.

Therefore, our chiefs said, "Whatever you bound with my statutes on earth shall be bound in heaven also;" and further He said, "If on

earth you loosen by not obeying my commandment, you shall also be loosen in heaven." That is why you will notice on the first part, it names the villages along the Columbia River, from one end to the other. Those our chiefs obligated for our usage and benefit.

FOUNDATION OF TREATY

In other words, in all, our treaty is founded on the statutes of God. That both contracting parties must come to an agreement before any living thing created by God will be destroyed by man. And our chief said also that gifts and money bring no good, but evil.

Also force treasury brings evil. As a Nation we have gone into courts and won our cases, yet our rights were construed to manmade laws, until laws were made that we could not take to court this case for some or other reasons.

As I said before, that Governor Stevens obligated the Government by saying all moneys be bound by the Government for protection and supervision of the Yakima Nation, because they said and ask a question which was the first commandment of all? Answer, Thou shall love the Lord thy God with all they heart, and with all thy soul, and with all they mind, and with all thy strength, this is the first commandment.

And the second is like, namely this, Thou shalt love thy neighbor as thyself. There is none other commandment greater than these.

And when he heard that he answered discreetly, he said unto him, Thou art not far from the kingdom of God. And no man after that durst ask him any questions.

In other words, gentlemen, you should know this better than I do, you cannot just walk in your neighbor's home and say, I am going to take this whether you like it or not.

Now we are going along at the time as we live as neighbors. Thou shalt not steal. Thou shalt not use false statements. As you first say, you may love as thyself; second is that if you are close to God, why ask questions? We bind ourselves as neighbors in the eyes of Almightly God. That is why it is said above that Congress appropriate money and the Yakima Nation property rights and title is protected.

VIOLATION OF TREATY

Instead, we find ourselves fighting before you gentlemen to not take my property rights and title, which in my jurisdiction God gave unto my people. As I have said in the first part of this statement, I was elected in July 1947, and from there was elected chairman of game, fish, and wildlife committee. We made a report in 1947, 1948, and 1949 to the tribal council and General Council of the Yakima Nation that our jurisdiction under which our treaty was executed and will be taken away from us without the Yakima Nation consent, and it will be given to the Secretary of the Interior, then we have no voice to defend our life, body, and soul; whoever gets our jurisdiction that they can do whatever they want to do with us—sure enough that has happened.

When we appear before these men, our guardians, they said, yes, we sympathize with you people, but what can we do? You see, they were thinking only of themselves, yet we are responsible for their

bread and butter. They tell us, I'm sorry, we cannot help you people. We pass resolution after resolution stating that we do not want the Dalles Dam constructed because it will deprive us of God given usage and benefits.

I will put into the record the minutes of the April 25, 1945 meeting at The Dalles, Oreg. That is the beginning of our objections and as I said, other objections had never gone on record because the Secretary of the Interior and his staff thought that, oh, the Indians will take money, the Indian will sell his soul even for a penny.

But you see, gentlemen, never were our chiefs agreeable to gifts, money, and provisions, as it is said treasure brings evil. Money cannot bring treasure of good forever, only for a short time; but what my life, soul, and body bring will also bring good, freedom, and happiness for life.

As the saying in our treaty of June 9, 1855, shall stand as long as the Columbia River flows and as long as the sun will shine and as long as the white top mountain shall stand. The God witness to our treaty of June 9, 1855 stands; if you gentlemen come out our way, we can show you those witnesses—the Columbia River, Mount Adams, and we can even show you that the redmen of the Yakima Nation have a life way of their own, even though it will be compared with the march of times they live in simplicity.

We speak our own language even in our community life like the white people. In addition, we have customs and habits that have descended from earlier times, yet they are modernized. They are varying customs and habits although modified, yet they live as God created them to live. So you see, gentlemen, I could go on and yet you people have short time, and that means you have short time with God. Yet when you appear before the throne of God, you must answer for deeds done on earth.

COOPERATION WITH NEW PRESIDENT

The spring of 1950, our delegation was here in Washington, D. C., and they went to the Assistant Commissioner and asked him if there was any bill in regards to the Dallas Dam and they told them, no, there was not, and they were told also that they had nothing to worry about, everything was being taken care of. And it was taken care of without our consent; that is why we have to call it a controversial issue, because what the outgoing president did was to try to let us try and make good with our new President. As he uttered a prayer of his own words during the inauguration in January 20, 1953, we were here at the time to utter that prayer with him. Eisenhower's prayer:

> Almighty God, we stand here, I and my future associates, and pray that we will make full our dedication, and that we may have the power to discern clearly right from wrong. Our concern shall be for all people.

You see, gentlemen, people begin to wonder how our Government could take away something from our neighbor's, the redmen, who gave more and received nothing only criticism and abuse since the coming of the whitemen into our country. People begin to ask what could we do to help and make our people whom we elect into office to see that we are treated equal as one body as children of Almighty God, each in its own jurisdiction in God's name and ways. That is why we as

people ask others to pray for us. We were depressed nation and only want to be left alone as God wants his children to be left along in their own customs and habits. Yet have customs and habits in the modern world and live with march of times, but the way we think; that is why we are here, gentlemen, to show that it is written.

Keep all the commandments which I command you this day, which the Lord they God giveth thee, that thou shall set thee up great stones, and thou shall write upon stones all the words of this law, when thou are passed over, that thou mayest go in unto the land which the Lord thy God giveth thee, a land that floweth with milk and honey; as the Lord thy God of thy forefathers have promised thee.

And there shalt thou build an altar unto the Lord they God, an altar of stones; thou shalt not lift up any iron tool upon them.

Thou shalt therefore obey the voice of the Lord thy God, and do his commandments and his statutes, which I command thee this day.

Cursed be he that removeth his neighbor's landmark, and all the people shall say, Amen. Cursed be he that confirmeth not all the words of this law to do them, and all the people shall say, Amen.

LANDMARKS

You see, gentlemen, we have landmarks on the stones that is our usual and accustomed fishing sites, which governs said location and site. If thou remove, thou shall be cursed. They are also commandments unless we obey them, for the word of God says, whoever then relaxes one of the least of these commandments and teaches men so, shall be called least in the kingdom of heaven; but he who does them and teaches them shall be called great in the kingdom of heaven.

It is also said, he who breaks the commandments shall be punished. You see, gentlemen, it is written since time only God knows who is doing them. What will happen is not for me to judge. I am only repeating the spirits of holy ghost of my forefathers who know these landmarks and commandments, and who could if they were alive appear before you and perform miracles, in order that you may believe by seeing the words of Almighty God.

Myself, I cannot do that for I am in another generation—the generation that must make its own path straight and clean in the eyes of God. I am thinking of my people of the Yakima Nation because, in world wars, we helped fight against Hitler who brought destruction to churches and burned all the Bibles, and said to the people that the people must worship him and take gifts to him because there was no other god; that he was the only one.

PARTICIPATION IN ARMED FORCES

We fought side by side with our neighbors for freedom of right, religion, and what free people live for. We fought in Germany, France, Africa, Italy, and now we are fighting with you people in Korea, for the same cause. Although we have been making wars since you people came to this country, you people repeat history in moving pictures, that we must prepare this country by bloodshed a free place to live; and for peace also, we have not made peace secure yet. Why not put our God's words and commandments to our people

that may bring us peace, our people in our own country are getting away from what the Constitution of the United States is founded on.

Let us not repeat what Hitler said, that the American people will destroy themselves within. Let us turn more to God's teachings so that we may have peace forever.

May I say and pray that I have touched you with the holy spirit from our Lord thy God, for I speak under oath and his presence. May I say this also, that again it is written. Temptation is strong when the people show how and what you can do with all this money, but money is here today and gone tomorrow from me but the saying is begone. You shall worship the Lord thy God which to me means that my occupation of hunting and fishing, is an invaluable right that no money can buy, because it is unperishable. If we obey the commandments, it will go on forever, it never wears out, our earning goes on forever from year to year.

We believe in preservation of invaluable right. We do not believe in destruction because destruction means the death. May I repeat, so have no fear of them; for nothing is covered that will not be revealed, or hidden that will be known. What I tell you in the dark, utter in the light; and what you hear whispered, proclaim upon the housetops, and do not fear those who kill the body but cannot kill the soul. You see, gentlemen, nothing is hidden in the eyes of Almighty God.

And also, what have these people done, what wrong have they done; yet they who are in interest of destruction, shout out loud, "Take away and build the dams." Therefore, I have labor for my people and may God have mercy on my soul and unto death give me rest, that I have and may right the wrong done unto my people. Amen.

Thank you very much. May God also have mercy on your souls.

(The information referred to previously follows):

MINUTES OF MEETING BETWEEN INDIANS AND ENGINEERS OF THE UNITED STATES ARMY, CITY HALL, THE DALLES, OREG., APRIL 25, 1945

The meeting called to order by Superintendent Shotwell.

The War Department was considering the construction of a dam near The Dalles. At one of the previous meetings at Pasco, Wash., Colonel Tudor said he was willing to discuss this topic with the Indians. Later on, the fish committee decided that the meeting was to be held today, April 25, 1945. Present were representatives of the three tribes.

Colonel TUDOR. It is good that we meet this afternoon to discuss this problem, and I am grateful to Mr. Shotwell for inviting me. I am also happy. Congress has not approved of a dam at The Dalles as yet. We have simply been told to make a report. At some later date and based upon this report, Congress may authorize a dam here. In making this report we are very anxious to introduce all the problems that may be involved. One of the more serious problems has to do with the fishing grounds you have used for so many years. I am happy to hear this afternoon what you have to present, and I would like to hear what thoughts you have to give us today. May I listen?

Mr. SHOTWELL. The Yakimas will lead off. We have five speakers. Next will come the Warm Springs, the Celilos, and the Umatillas under Mr. Roe Cloud. These delegates that are going to speak represent 3,000 or more Indians from the named tribes.

EAGLE SELATSEE, Chairman of the Yakima Tribal Council. The construction of the Dalles Dam will affect our fishing industries and finances. The Yakimas were in on the 1855 treaty with the United States Government and retain their rightful fishing privileges. The construction of the dam will destroy the Indians'

fishing rights forever on the Columbia River. In all the Government dealings outside the United States, their word is respected, and we feel that the treaties made within the United States boundaries should be respected also.

WILSON SHUSTER. The speaker before me has spoken. The building of the dam would be a serious economic damage to the fish; besides, the Indians would be losing their important food supply. They also have a religion regarding the salmon run.

John SUSKUAHITE (Yakima Indian). My friend, who has called us together at this meeting. We are making our statements, bringing out some statements in respect to our Indian rights. I am going to make my statement brief so it will give the other speakers a chance to speak their parts. Whenever the Indians were created on this land, and after creation of Indians, the religious belief were handed down for us to follow, and all these Indian foods were planted here for the Indians. I am speaking for as far back as I can remember. We made our minds and hearts we had to come to an agreement. We made a treaty at that time so that the Indians would live on this land the the white man also. After the treaty our children have been growing up from time to time; therefore, we could not change that treaty. In that treaty the Indians retained the river as a place to take food. The Indians from all these reservations have come following the trail to the river to get salmon for their subsistance. I am opposed to the construction of the dam; it would destroy the food—salmon.

Stanley STAHI. I am looking forward to this meeting and I am glad I am here to speak before the members and Colonel Tudor. This is the proper way of getting something done. To agree or not. I would like to have Colonel Tudor consider my statements. The first creation was water and then salmon was put into it. The Indians regarded salmon as their chief food, and their other foods were berries and deer. Fishing in all the usual and accustomed places were included in the treaty rights. All usual and accustomed places should remain and be preserved in the treaty forever. A big rock was preserved for them to go fish for their salmon. All the trails were leading to one particular place, and that was Celilo Falls. The United States Engineers are thinking of constructing a dam. It would flood the falls; and, therefore, I oppose the proposition of building a dam.

Alex SALUSKIN. It is our firm belief that the building of the dam will totally wipe out the fishing grounds. The treaty of 1855 between the Yakimas and the Government has been maintained up to this day, and the Government asked that the tribes would be left in peace—undistrubed. Our treaty of the Yakimas is not regarded as a scrap of paper. Representatives of the War Department, we are asking that our rights be protected, that the Dalles Dam should not be constructed, because it is the only location where we get our salmon. We hope that they will make recommendation that they will build the dam elsewhere.

Superintendent ELLIOTT (introduces Isaac McKinley). I am now introducing representatives of the Columbia River Indians, of which the Warm Springs Indians are descendants.

Chief TOMMY THOMPSON of Celilo. I am the oldest and you are my younger brother. I am supposed to be protected by the Government. I do not want to make a statement that would hurt your feelings. I was born at Celilo. I live there and I am still there. For this reason I throw open the river for everyone to fish. A great fear came to me when I heard that the white man was going to construct a dam below my fishing place. I was worried that this would deprive me of my food and my living. The salmon was my main food by which I was raised to manhood. This dam should not be constructed. I desire that my statement be taken into consideration, and I sincerely hope that it will reach the proper authorities. As you can see, we are trying to protect the food that comes from this river. Nobody knows for how many generations these Indians have been fishing at Celilo Falls. Up to this day we are benefiting from our fishing and so are the white people. We canned or sell our fish there. We Indians are helping in the war effort by sending our fish to be canned for the Armed Forces. I am praying to the War Department to not approve of this dam being constructed above The Dalles. I just want to keep my nerve. I thank you.

CHARLIE QUATTOCKEN. I am glad to stand before you my friend. I have already met you at Pasco. There I learned that there would be a meeting at The Dalles. The building of the dam would be an end of my fishing, and our rights would be cut off. We younger generations inherit these fishing grounds and if this dam is constructed where am I going to get my food salmon? We have roots, deer, and berries which we can get in the mountains, but I pray that this dam will not be constructed. Every article of foodstuff I might have are disputed. What about the children who are growing up? Where will they get their

salmon? We Indians who gather here today protect against the construction of this dam. It should be stopped. It should not be permitted.

HENRY THOMPSON. I will probably go on the same line as my father. The Indians are older than the white men. The white men come next. Will I lose my fishing rocks? If the dam is built, starvation will follow for the Indians. Various tribes exchange with fish. The reservations—Yakimas, Umatilla, Warm Springs, and the Columbia River Indians. From time immemorial the Indians at Celilo have practiced bartering—trading fish for furs, game and deer hides, roots and berries. Since the war a major portion of the fish caught at Celilo have been turned over to the canneries and processed for use of the Armed Forces. In these high dams, such as proposed for The Dalles, there is no way for the young salmon to pass downstream safely. They will be killed going over the dam. In event the dam is built near The Dalles the backwaters will flood the Celilo Indian fishing grounds and the Indian burial grounds on the islands in the river.

JOE MCCORKLE (Wasco Tribe). Someday after the treaty the Warm Springs were moved to the Warm Springs Reservation. War broke out. My ancestors from the Warm Springs and Wasco Tribes enlisted as scouts and helped the Government win these wars. They were promised by the War Department that they would be protected at all times, but before that time they still returned and fished as they usually did. They were told that they could still hunt, dig roots, and pick berries for their sustenance. The Government promised that they would educate them, build them schools, teach them how to farm, and many other things that are useful to them. Construction of this dam would be disastrous. We do not want this dam built. The Wasco tribe believes War Department should help the Indians in safeguarding their rights and in preserving the Celilo fishing, the last one left to us. The War Department should report these problems and help the combined tribes.

DAN HOWARD (Warm Springs Tribe). My statement as to the construction of the Dalles Dam is "No." If this dam is constructed, there would be no proper fish-ladders; then our fish would be destroyed. There was a selfish tribe who fought the white people and killed many soldiers. Our people joined the United States and helped them to overcome this selfish tribe and then came back to the river and signed this treaty of 1855 in which our tribe was granted their fishing rights. A treaty was made, and my ancestors were given their land; your ancestors came and took the surrounding land, but the Indians never ceded their fishing rights to the Government. The Government made an agreement in this treaty stating that if anyone molests you, we will protect you.

FRANK STOCKISH (Klickitat Tribe). I am glad to meet you today. There are several things which I am worried about every day, among them are my sons who are overseas serving in the Armed Forces. I wish to preserve my rights which will be passed on to our younger generation who are returning from serving our country. The Bonneville Dam has destroyed several of the fishing places already. Every place that we try to go now, is restricted; even the old trails which our ancestors used are restricted. My ancestors have fished at Celilo; then I won't have any place to fish. I protest against the building of this dam. Forgive me if I have hurt your feelings. The salmon is very dear to us Indians.

SALLY ANN JOYCE (Cascade Tribe, representing both sides of the river). I was the first one to be heard in my own country where the Bonneville Dam is now built. I wish I had been notified at that time so that we could have had a chance to make agreements—just like this man was willing to sit and council with the Indian people. Today I am believing this brother of mine who is sitting at the end of the table. I was told by the man, if I want damages for my fishing places I could be paid, but I do not want it that way. This is my life. I would not have been agreeable to selling the rocks from where my people fished. I want my fishing places replaced. The original fishing rocks are destroyed by the Bonneville Dam. If this proposed dam is built and completed what will become of us old people? Where will our boys, who are overseas fighting, make their living when they come back?

COLWASH YAHYOUAN (Washram, on the Columbia). Old man Colwash is buried on one of these islands, there are many others who are buried there. Myself, I am very worried about my cemetery. If Celilo is flooded there will be a great starvation among the people. We have nothing—everything depends upon the fish from which we make our living. We have no land from which we can gain an income. What about our little village of Spearfish? Could you furnish us with homes? I wish to ask you a question, Colonel Tudor. When the Government builds the dam and floods our fishing grounds, will the Indians be put on a ration for the balance of their lives?

Colonel TUDOR. I cannot answer that. It would be whichever way the Congress decides upon. I can only report that which you desire.

ISAAC MCKINLEY (Warm Springs Tribe). I am strongly opposed to the building of a dam at The Dalles. Many have given their reason why they are opposed. There are people living on both sides of the river who depend entirely on their fishing for food. I want these tribes to be respected by the people of Oregon and by the Federal Government. The Indians have prior rights of fishing along the Columbia River. I am the last speaker on the list. The Celilo fishery is a source of income for the Indians along the Columbia River.

In making your report, Colonel Tudor, I know that it will be a good one and that in doing so, I wish you would consider the facts brought before you today.

ROE CLOUD (introduces Chief Jim Billy). Chief Jim Billy of the Umatilla's: In representing my treaty, it will be just like we are bringing our papers out It is good clear words from both sides—this agreement made by the white people and the Indians. From there on every thing took just accordingly. The Indians food they have talk about, the river and the amount of land where the Indian's food is located. The Indian did not give to the Government all of the river where the fish goes to spawn. It was agree upon at that time. You have heard all of the statements made by the Indians here. I do not want to take up too much time, as the time is getting short now. That is my reason that I respect their talk, that we are having today. The Government said that when ever trouble arises—you come and tell me about it, and then I will help you. Then every thing will be straightened out with my help. If the present canal were widened and deepened navigation would get what it needs and you wouldn't hurt the fishing. I wish it could be that way instead of building the dam on the river. You will help the Indians that you hear today.

Chief JIM KARINE (Walla Wallas). I am very glad to be here today. I would like to bring to you a picture of how the representatives of the Government met at the treaty grounds. I represent the remainder of my people. We should like to enjoy our rights over lands which my people formerly ruled. I still maintain that the treaty still holds, and my rights are still an object which the Government should uphold and protect. I believe that today the State is assuming authority over Indian fishing not intended for them to have when the treaty was signed. I believe that the treaty made by my people still operates—until the world is no more; then the treaty will end. These are the thoughts that I would like to remember.

GILBERT CONNOR (representing the Cayuse). This is one of these occasions where a pinch hitter will come in. We have been generous in our dealing with the white people. We have given you the country. Sometimes we had to fight for our rights and eventually were subdued. Again we fall back and give in to a stronger people. The least we ask of you is just consideration. We know the Government will do its utmost to help us. We have been with them, against them, and now we are with them again today. They will give us just consideration.

Chief YALLY (Rock Creek). Today others have spoken and what they have said will never be lost. As far back as I can remember I have seen these Indians travel to the river to get their supply of fish. It has been proposed that a dam will be built above The Dalles which would destroy the Indians fishing places on both the Oregon and Washington sides. If their proposed bill passes what will happen to the Indians who have been fishing at Celilo and below? As we all know there is no more land to be allotted to the Indian. The money we get from fishing is our only income. I am not ashamed to admit that I am considered a very poor Indian on both sides of the river. For that reason I am objecting to the dam that would destroy our fishing locations.

WANOS YALLUP. There are about 300 fishermen that fish at Celilo each year. Each of these fishermen have about three dependants and two-thirds are landless. I can also say that about two-thirds of the boys who are overseas, numbering about 225, have fished at Celilo at one time or another. About $200,000 each year is realized by the Indians, sometimes more. Some of the boys have enlisted into the armed service—as soon as they are 18. These younger boys did not have an opportunity to fish, but they probably would have if they were given the opportunity.

Colonel TUDOR. March 2 of this year the President presented the bill. This bill authorized us $50,000 for canal sites and other grounds that were submerged by the Bonneville Dam. That money has not been appropriated for expenditure yet. I do not expect that it will be appropriated until after the war. Not until then can we work out the details of obtaining the land and the fishing grounds. I have been very happy to meet with you this afternoon and listen to you. I have

learned much that I did not know before. In preparing one report to the Chief of Engineers, I will put forth the importance of the thoughts you have given to me this afternoon. I do not know what Congress will do relative to what they will do here, but whatever is finally done I have confidence they will do right and in the end you will realize full satisfaction. Thank you again for the time and privilege of meeting you. Answer was made to a question by Sally Ann Joyce.

Speakers from the Umatilla Reservation presented Colonel Tudor with the following protest:

"PROTEST

"We, the chiefs of the Walla Walla, Cayuse, and Umatilla Tribes of the Umatilla Agency for ourselves and the duly elected representatives of the above tribes do hereby protest and make known one objection to the proposed construction of the Umatilla and the Dalles Dam on the Columbia River. The construction of the Umatilla Dam and the Dalles Dam in effect is a violation of our treaty rights under the treaty of 1855 in that the dam inundates our usual and accustomed and usual fishing places to the mouth of the Snake River, besides interferring greatly with the spawning of the salmon of the Columbia upon which fish from time immemorial from generation to generation our people have maintained their livelihood and subsistence. Surely a government which exists for the respect for the fundamental law of the land; namely, right to property and especially if protected by solemn treaty, can only do that which is honorable and just to its own minority group. The American Indian. Date, March 20, 1945. James Kanine, chief of the Walla Walla Tribe. Anthony Red Hawk, chief of the Cayuse Tribe. James Rilly, chief of the Umatilla Tribe.

"WARM SPRINGS' RESOLUTION

"Whereas the Warm Springs Indians and the Columbia River Indians who, prior to the treaty of 1855 were located at Celilo Falls, Oreg., and from that point down the Columbia River to the Cascades of the Columbia River where they gained a livelihood principally from salmon fishing and where their forefathers had, from time immemorial lived from fishing, and

"Whereas the Columbia River Indians have since remained at Celilo Falls and other nearby Columbia River points where they have continued to gain a livelihood from the fishing industry, and the Warm Springs have, since their removal to the reservation in the year 1858, returned each year to the accustomed and inherited fishing sites at Celilo Falls and nearby points to fish for subsistence and for commercial purposes their industry constituting an important item of the present time in the economy of their tribes, and

"Whereas the destruction of the fishing industry by the construction of a dam at or near The Dalles which would flood Celilo Falls, would destroy the industry and source of livelihood of the Columbia River Indians and would greatly injure the Warm Springs Indians by destroying one of their principal sources of income; be it therefore

"*Resolved*, That the Warm Springs Indians and the Columbia River Indians go on record as being unalterably opposed to the construction of the proposed Dalles Dam and pray that their interests and rights be respected by the Federal Government in any decision looking toward the construction of such dam."

(This resolution was signed by the delegates headed by Chief Tommy Thompson, April 25, 1945.)

Chief Williams from Rock Creek Valley, Goodnoe Hills, Wash., presented Colonel Tudor with petition signed by many of his members which reads:

"We, the undersigned, members of the various tribes and bands of Indians residing near or on the north bank of the Columbia River in the State of Washington, hereby respectfully petition the Commissioner of Indian Affairs, the Secretary of the Interior, and the Washington State delegation to the Congress of the United States to intervene in the construction of a dam to be proposed on the Columbia River at or near The Dalles, Oreg., for the purpose of safeguarding and protecting existing Indian fishing rights as guaranteed by the treaty of 1855 between the Indians and the Government of the United States for the following reasons:

"1. The proposed construction of a dam at The Dalles of the dimensions of such dam as heretofore been erected by the Government on the Columbia River

would flood Celilo Falls, thereby completely destroying the ancient and valuable Indian fishing there.

"2. By the destruction of this fishing, one of the largest and most important remaining to the Indians of the Northwest, the Government of the United States would, in effect, nullify an important section of the treaty of 1855 between the Indians and the United States.

"3. By the destruction of said fishery at Celilo Falls, an industry built up by the Indians and upon which the Indians depend for a livelihood would be taken from them.

"4. The boat canal between The Dalles and Celilo, if inadequate at present, could be developed and made sufficient to cope with present or future demands of navigation, and at a lesser expenditure of funds than would the construction of the proposed dam.

"5. A sufficient number of capable hydroelectric dams could be constructed elsewhere on the Columbia River where destruction of fishing rights would not be so critically involved, to meet all the necessary demands for power."

RESOLUTION

Whereas it appears that the Army engineers are seriously considering the construction of a Dam on the Columbia River at or near The Dalles, Oreg., and in the immediate postwar period; and

Whereas such a dam will inundate Celilo Falls, an ancient and valuable fishery of the Yakima Indians, who under their 1855 treaty reserve their right to take fish at those old and accustomed fishing sites; and

Whereas the destruction of this fishery by the construction of the proposed dam would nullify a valid and sacred treaty between the Yakima Tribe and the United States; and

Whereas the members of the Yakima Tribe depend largely upon the fish caught at these fisheries for a major portion of their subsistence as well as placing a sacred value upon such salmon as an important and material part of their religeous ceremonies; and

Whereas the construction on the Yakima River of the Rimrock Dam and the Rose Dam, and the construction in the Columbia River of the Bonneville Dam and the Grand Coulee Dam has done untold damage to the salmon runs; and

Whereas there were more than 225 Yakima youths from the Yakima Tribe in the armed services of the United States fighting to defend their country and the sacred rights reserved by them under their 1855 treaty; it is now

Resolved by the Yakima Tribal Council and elected general council agenda committee in special session this 8th day of March 1951, That the Army engineers shall be notified that the construction of the Dalles Dam is considered to be unjust and injurious act against the best interests of the Yakima Tribe and that the construction of said dam will completely destroy old and accustomed fishing sites specifically reserved by the Yakima Indians and their 1855 treaty; and it is further

Resolved, That such damage will affect the Yakima Indians both spiritually and economically to an extent far beyond any monetary recompense; it is further

Resolved, That the Yakima Tribe wants an opportunity to be represented at congressional hearings.

Done and dated this 8th day of March 1951 at the Yakima Indian Agency, Toppenish, Wash., by the Yakima Tribal Council and the general agenda committee by a vote of 14 for and 0 against.

YAKIMA TRIBAL COUNCIL,
KIUTUS JIM, *Chairman.*

Attest:

JOE MENINICK, *Secretary.*

Mr. NIEBELL. Mr. Totus is the next witness. He is a member of the tribal council of the Yakima Tribe.

THE YAKIMA TRIBE OF INDIANS, WASHINGTON

STATEMENT OF WATSON TOTUS, DELEGATE

CELILO FALLS FISHERIES

Mr. TOTUS. Gentlemen, I wish to thank you for the opportunity to tell you why the Yakima Nation opposes any additional appropriations for the Dalles Dam. The construction of this dam will violate the Yakima treaty and destroy a great religious, historical, and scenic natural monument, the Celilo Falls fisheries.

The religion of the Yakima people is directly connected with the Celilo Falls fisheries. One of the most important teachings of our religion is that the salmon were given to us by the Great Maker of all things, and it was our duty to protect and preserve this food supply for future generations of our people. Even in the taking of the fish certain religious ceremonies must be observed before they are eaten. My people have depended upon the salmon as one of their chief sources of food for hundreds of years and long before the white man came. The Dalles Dam will destroy the last of our fishing places left to us by the white people. All the others have been taken from us in spite of our treaty.

The Celilo Falls Fisheries are also the chief recreational grounds of my people. Just as the white people have their national parks for rest and pleasure, so do we gather at this place for ceremonies and recreation.

If the Dalles Dam is built, my people will lose forever their fishing rights at Celilo Falls; their income from fishing will be gone; their great religious and recreational shrine will be destroyed, and their faith in the loyalty of the United States to its solemn treaties will be damaged.

Mr. NIEBELL. The next witness is Mr. Eagle Seelatsee, who is vice chairman of the tribal council.

Senator KNOWLAND. You may proceed.

STATEMENT OF EAGLE SEELATSEE, DELEGATE

PREPARED STATEMENT

Mr. SEELATSEE. Mr. Chairman, I believe at this time I will introduce Mr. Eagle Seelatsee, member of the tribe and official delegate. I have a written statement that I should present to the committee because it is already written up and they can read it.

Senator KNOWLAND. The statement will be printed in full at this point in the record.

(The statement referred to follows.)

STATEMENT OF EAGLE SEELATSEE, DELEGATE FROM THE YAKIMA TRIBE OF INDIANS, WASHINGTON

IN OPPOSITION TO CONSTRUCTION OF THE DALLES DAM

Mr. Chairman, gentlemen of the committee, on June 9, 1855, the Yakima Indian Nation entered a solemn treaty with the United States. This treaty has ever since then been considered by the Yakima Indians as a law supreme to any of their own. They have lived by it: it has become sacred to them. This treaty has become a great source of strength and protection to the Yakimas as a minority group. It was their only guaranty to the preservation of their ancient rights.

One of the most important of those ancient rights of the Yakima Indians was the right of taking fish from the Columbia River. The Yakima Indians would not have made the treaty if they had thought that these fishing rights would not be protected as guaranteed to them by the treaty. They would not have entered this friendly agreement with the United States if they had believed it was not going to be honored.

For many years now the provisions of the treaty protecting the ancient fishing rights of the Yakimas have been ignored. I can remember back to my early childhood when the old people were talking of the destruction of some of our fishing sites caused by the building of the Cascade locks, the Dalles locks, and the locks at Celilo. The commercial fishing companies were also coming in and taking the better fishing sites from us for their own use. And then the United States started the construction of its many dams in the river. Bonneville Dam destroyed many good fishing sites above it. The water stored by this dam backed up for several miles and covered these fishing sites. McNary Dam did great damage to the fish runs themselves. Great numbers of fish were prevented from reaching the spawning grounds by this dam and they died without reproducing for future fish runs. Grand Coulee destroyed much spawning. The fish cannot go above this dam on the Columbia, and the fine spawning grounds at the head of this river are now gone. The Dalles Dam will completely destroy the last and greatest fishing sites of the Yakima Indians. All of this has resulted in the gradual destruction of this ancient and important fishing right reserved to the Yakima Nation by solemn treaty with the United States.

It is my plea to you, gentlemen, that our treaty not be destroyed. It is being destroyed today by being ignored. It is being destroyed by this method just as completely as if it were to be torn in pieces. It is my plea to you that, if you wish to change provisions of this treaty, you negotiate those changes with us.

The Yakima Indians consider their fishing rights and treaty to be priceless and sacred. They hope the United States will give those fishing rights and the treaty the same reverence.

Mr. NIEBELL. You go on record as opposing the construction of the Dalles Dam, is that correct?

Mr. SEELATSEE. Yes.

Mr. NIEBELL. The next witness is Mr. Alex Saluskin, a delegate of the Yakima Tribe of Indians.

STATEMENT OF ALEX SALUSKIN, DELEGATE

PREPARED STATEMENT

Mr. SALUSKIN. I would like to stand so my adversaries can see me. I have a prepared statement here I would like to present for the record.

Senator KNOWLAND. The statement will be printed in full at this point in the record.

(The statement referred to follows.)

IN OPPOSITION TO CONSTRUCTION OF THE DALLES DAM

Honorable Chairman, honorable Members of Congress, I am a representative of one of the largest Indian reservations in the State of Washington. Fourteen confederated tribes and bands compose the Yakima Nation. Membership of our tribe is 3,850 men, women, and children. Some of our people live at Celilo, Oreg.; Tenino, Oreg.; The Dalles, Oreg.; Goodnoe Hills, Maryhill, Wisham, Spearfish, Lyle, and White Salmon, Wash. The foregoing communities are located along the Columbia River. They still call themselves Mid-Columbia Bands, but they are officially and legally members of the Yakima Nation and are entitled by the act of August 9, 1946 (Public Law 706, 79th Cong.), to all of the privileges and benefits which are reserved in the Yakima Treaty of June 9, 1855, ratified by the Senate of the United States, March 8, 1859, and which is the supreme law of the land as provided in the Constitution of the United States.

Our tribal government is the same as it was before the treatymaking days. Each General Council meeting is advertised for 30 days and the agenda is posted

to inform the members of the tribe the business to be considered. A quorum of 170 heads of families is required before the tribe can officially elect tribal councilmen, delegates, or vote on major problems. The membership of our tribal council is 14—all elected by the general council. The general council delegates its authorities by resolution to the tribal council.

I am authorized officially by the Yakima Nation to present their contentions and statements for the record to be reviewed by you, honorable Congressmen, without bias or prejudice.

1. The Celilo Falls fisheries were always jealously protected by the bands and tribes who always occupied and used the fisheries from time immemorial and later after it was reserved by the Yakima Treaty of 1855. The Yakima Tribe has successfully protected the fisheries in the State and Federal courts. *United States* v. *Taylor*; *United States* v. *Winans Bros.*; *United States* v. *Seufert Bros.*, all involved fishing rights by Yakima Indians.

My grandfather, Chief Saluskin (Wee-ya-weekt) died at the age of 90 in the year 1918. His cousin, Chief Seven Mountain, a little older, came to Washington, D. C., in 1916 and never came back to the reservation but died in the East fighting for his people. Chief Saluskin came to Washington, D. C., many times to plead to the Government officials and remind them of their obligations to the tribe. All of the rights were to be protected forever, as long as the white mountains stood covered with snow and the waters flowed from there to the ocean; the sun rose in the east and set in the west, the Great White Father was obligated to the treaty of 1855 in exchange for the cession of millions of acres of land to the Government for the white people to live on as brothers and friends. My grandfather was an honest man well respected by his white friends and the early pioneers. He and Chief Seven Mountain told the people just what was told to them at the time the treaty was negotiated by Governor Stevens. He said that the white people are honorable and Christians and that they would not take away our rights or abrogate our treaty without our consent, especially our fisheries at Celilo Falls.

2. The Yakima Tribe objects and is opposed to The Dalles Dam project, which is now in its early preliminary construction. Very little actual construction has been done. Congress can stop this construction now and save the fisheries and the last of the many falls along the Columbia River, the great Celilo Falls. Congress can pass a joint resolution to stop the construction and save millions of dollars of taxpayers' money.

The President of the United States prayed to God so the world could hear. We all heard him pray and saw him pray asking for help in solving the many problems which were left to him. I prayed in my humble way to save our shrine, birthright, and religion; that the treaty obligations of the United States be carried out. General Eisenhower, now President of the United States, knows how well our Indian boys fought in World War II and the present conflict in Korea to protect the honor and dignity of our country.

The Corps of Engineers asked the Yakima Tribe to authorize a negotiating committee. On July 25, 1953, the Yakima General Council authorized the tribal council by resolution to negotiate with the Corps of Engineers and to conclude a settlement for the Yakima Tribe, delegating all of its powers in this matter to the tribal council. The Yakima Tribal Council selected 6 members as a negotiating committee, later adding 2 more members. The committee was organized to work as instructed by the tribal council in its negotiations with the Army engineers. First of all, the committee was to investigate what the tribe was to give up. The Tribe feared they were going to lose much more than just their fisheries and felt that all their treaty rights might be taken from them. The following aspects of the fisheries at Celilo were studied and evaluated by the committee: business value, recreational value, religious and cultural value. Experts were consulted and studies were instituted. While the committee was working and preparing this information the Corps of Engineers arbitrarily set a value for the fisheries at $23,274,000. The Yakima Tribe strongly urges that when all of the aspects of these fisheries are considered their value will far exceed the figure set by the Corps of Engineers. This was the first step made by the Army in discouraging fair negotiations with the Yakima Tribe.

Then the Corps of Engineers went ahead and concluded separate settlements with the Umatilla and Warm Springs Tribes of Oregon for their alleged interests in the Celilo fisheries, agreeing to pay each of those tribes approximately $4 million. The Warm Springs Tribe ceded away their right to fish at Celilo by the treaty of 1865. These fisheries were not "ancient and accustomed" fishing stations of the Umatilla and Nez Perce Tribes. Any members of those tribes who have fished at Celilo in recent years have done so at the sufferance of the Yakima Tribe. Even

the Army engineers have admitted on several occasions that the dominant tribe to be treated with in the negotiations was the Yakima Tribe. It is the belief of my tribe that these actions were taken by the Corps of Engineers for the purpose of convincing Congress that they were successfully treating with the Yakima Indians, as they had been instructed to do, so as to justify continued appropriations for the dam, and for the purpose of forcing the Yakima Tribe to accept the Army's terms of settlement. This was the second step taken by the Army in discouraging fair negotiations with the Yakima Tribe.

When the Army negotiators were asked by the Yakima negotiating committee if their minds were closed on these decisions they had made on the value of the fisheries and on the basis of settlement with each tribe, or whether they would seriously consider other values and other basis for settlement, they replied that their minds were pretty well made up. This was the third and most discouraging step made by the Army in the negotiations, and it convinced the member of my tribe that the Army was not convinced as a plan for settlement had already been made by the Army which we could only accept or reject.

In conclusion I pray that the new administration and Congress reconsider the commitments made by the former Congress and administrations and save the Celilo Falls and fisheries and give new life and meaning to our treaty.

GENERAL STATEMENT

Mr. SALUSKIN. Our tribal attorney had expressed the views and the consensus of our people in regard to the opposition to the Dalles Dam at Celilo, Oreg.—or at Dalles, Oreg.—where we have this great fishery. We feel that the people were at one time opposed to the dam, different organizations, and either State organizations or Federal organizations. All of a sudden they have changed their views in regards to their opposition. Later I have learned, because they were suppressed by their superiors.

So it was necessary to do away with Indian fishing at this particular place so the sportsmen would have more fishing and also the commercial fishermen would have more fish to catch. I feel, gentlemen, that it is discrimination when you have legislation where you would have to do away with one group to benefit another.

Therefore, our people object to legislation of that sort. We feel if the fisheries were preserved, we would have something of great benefit to us and we would have great respect for our country. We are citizens. We feel from the beginning of time we were oppressed people.

My people feel this one time Congress should realize by doing one thing right for the Yakima Nation it would be greatly appreciated by other people of this country.

I thank you.

Mr. NIEBELL. Our next witness is Mr. Fred. A. Davidson, biologist of the Yakima tribe.

STATEMENT OF FREDERICK A. DAVIDSON, YAKIMA TRIBAL BIOLOGIST

PREPARED STATEMENT

Mr. DAVIDSON. My name is Frederick A. Davidson. I am a biologist employed by the Yakima Indians. I think you remember me from last year.

I realize time is short. I have a statement here and will ask that it be supplied for the record.

Senator KNOWLAND. The statement may be printed in full.

(The statement referred to follows:)

STATEMENT OF DR. FREDERICK A. DAVIDSON, YAKIMA TRIBAL BIOLOGIST, IN OPPOSITION TO THE DALLES LOCK AND DAM

The construction of The Dalles Lock and Dam will destroy the fishery of the Yakima Indians at Celilo Falls in the Columbia River. In doing this it will break a sacred treaty of the United States with these Indians for the preservation of this fishery. The construction of the dam will also destroy Celilo Falls one of the most historical natural monuments on the Columbia River. These falls have been a point of interest and attraction every since their discovery by Lewis and Clark in 1805. What, if anything, is to be gained by the loss of this natural resource and the destruction of these human values?

At a hearing of the Yakima Indians before this Senate subcommittee on May 12 of last year, I stated that the power production of Bonneville Dam is seriously reduced when the flow of the Columbia River recedes. Last fall and winter the flow of the Columbia River remained at a very low level for an extended period of time. During this period of low water the power production of the dam was so greatly reduced that a state of emergency existed and many of the industries and domestic users depending upon the dam for electricity had to be drastically curtailed.

The Dalles Dam which is under construction in the Columbia River some 50 miles above the Bonneville Dam will have its power production just as seriously curtailed by a drop in the river's flow as does Bonneville Dam. Therefore, why put $350 million or more into a hydroelectric plant that can operate at full capacity for only 6 to 8 months of the year.

The Army engineers are cognizant of the loss in power production of the lower Columbia River dams when the flow of the river recedes. In order to offset this loss the engineers have consistently recommended the construction of 2 large storage dams, 1 at Libby in the upper Columbia River region and 1 at Hell's Canyon on the Snake River. The millions of acre-feet of water stored by these dams when liberated during the low water period of the Columbia would bolster up the production of the lower river dams. Secretary McKay has withdrawn the petition of the Interior Department opposing the private power development of the Hell's Canyon region. If this policy is carried out, which it seems likely to be, it will prevent the construction of Hell's Canyon Dam and the storage of flood waters. Senator Martin of Pennsylvania, chairman of the Senate Public Works Committee, has introduced a bill to rescind the authorization of Libby Dam. This, then, will leave the lower Columbia River dams permanently handicapped in power production. Therefore, why spend millions of dollars to build the Dalles Dam in the lower Columbia River, where it will be permanently handicapped in power production for at least 4 months out of the year?

There is a shortage of power for existing industry and domestic consumption at the present time in the States of Oregon and Washington. However, it is very doubtful if the construction of the Dalles Dam will alleviate this shortage. There is every indication that the entire production of the Dalles Dam will be utilized by the establishment of new industries in the vicinity of the dam. A large block of power has already been set aside for an aluminum factory that is being proposed for the Dalles, Oreg. Furthermore, if the Federal contracts for power to these new industries are the same as those issued for Bonneville power, the Federal Government will have to supply these new industries with steam produced power when the production of the Dalles Dam cannot fulfill the contracts on account of a drop in the river's flow. This will create an additional load on the power facilities of the region and make the present shortage of power more accute. It appears that there is a hidden policy to oversell the power production of each new dam on the Columbia River in order to create a false shortage of power that may be used as a pry to get congressional funds for additional power projects on the Columbia River and its tributaries.

There is much talk about how The Dalles Dam will pay for itself through the sale of electric power it will generate. Very seldom is it mentioned that the cost of the large boat lock in The Dalles Dam will be written off arbitrarily and not charged to the cost of the dam when its capitalized value is determined. In other words, the millions of dollars that will go into the boat lock in the dam will be a direct gift by the Federal Government to the small group operating the river transportation.

No one would lay out millions of dollars to bring back the horse and wagon as a means of transportation. Yet the Federal Government is doing virtually the same thing when it builds large boat locks in the Columbia River dams to bring back an old and antiquated method of river barge transportation. During peacetimes

the Columbia River barge transportation is in direct competition with the railroads that parallel the river. These railroads are and have been losing money for the past 10 years because so much of their freight and passenger business is being taken away from them by the motor freight trucks and passenger buses using the highways that also parallel the river. In times of war the river tug and barge becomes a "sitting duck" target for bombers and besides all of the river's transportation can be completely interrupted by the destruction of the boat lock in any one of the dams. There is certainly no economic or other justification for giving millions of dollars of the taxpayers money to a small group to operate an old and antiquated method of river transportation that at best can serve only 3 States in the Union.

When testifying before the House Subcommittee on Civil Functions on February 19 of last year I pointed out that the hydroelectric and industrial development of the Northwest was being made at the expense of the Eastern States taxpayers. The chairman of the subcommittee informed me that the development of the Northwest was going to be a benefit to the country as a whole and its cost was being borne by all of the taxpayers alike. I still insist that there is nothing to be gained nationally by destroying the industry in one part of the country to develop it anew in another part. It is interesting to note that Representative Fenton, of Pennsylvania, has given us a concrete example of this uneconomic procedure as recorded in the Yakima Herald, April 24, 1953.

Representative Fenton made the following comments during the testimony of Kerby Billingsly, Chelan County public utility commissioner, before a House appropriations subcommittee. Billingsly made a plea for funds for the Bonneville power Administration in which he said that westerners "are sick and tired of having easterners say * * * that their tax moneys are being spent to develop the western power projects."

Fenton took immediate exception, exclaiming:

"I have been so sick and tired of listening to that statement that the whole country is benefiting by it that it is not even funny.

"Now I will tell you how it is hurting the country and in no uncertain terms, particularly my part of the country."

Fenton stated that three coal mines in his Pennsylvania district had been closed putting 2,900 men out of work. He said:

"Those people are going on relief and the taxpayer has to bear the burden."

Fenton continued:

"This Government has absolutely turned its back on the eastern section, particularly the anthracite coal area * * *. You say that easterners should not have a thing to say about it. We are paying the taxes for you fellows and do not think we are not; we are paying plenty. I am just about sick and tired of it too."

"I, too, am in sympathy with irrigation but think power is getting too powerful throughout the country, not only in the Northwest but under the guise of cheap power it is taking our industry away from us."

So intent are the pressure groups and the Army engineers in promoting the hydroelectric and industrial development of the Columbia River that all sense of human values is being discarded. The aluminum industry operating on Bonneville power near Portland, Oreg., is being allowed to operate without removing the fluorine gas from the fumes escaping from its furnaces. As a result this deadly poisonous gas is killing the cattle in the vicinity of the industry and endangering the lives of the farmers. The farmers have large lawsuits against the aluminum industry (Reynolds Co.) pending in the courts. They have also appealed to the press and Board of Health of the city of Portland, for assistance in their efforts to stop the Reynolds Co. from discharging the fluorine gas. I have been informed that both the press and board of health have taken no action in this matter for fear of casting a harmful reflection on the industrial development of the region. It is about time that someone puts a stop to this insane rush to develop the aluminum industry in the Northwest at the expense of the taxpayers and the destruction of the natural resources and human values in the region.

As of last year, I would like to refer to the progress being made in the use of atomic energy as a source of industrial power. Small pilot plants are being operated for the production of electric power by atomic energy. These plants are indicating great possibilities for the use of atomic energy for this purpose. In fact the industrial experiments of the Atomic Energy Commission are so promising that the Westinghouse Electric Co. is putting $2 million into a factory for the commercial production of atomic powerplant equipment.

There is little doubt but that the use of atomic energy for industrial power will be made a practical reality in the very near future. When this occurs the hydroelectric developments in the Northwest will become dwarfed as producers of electric power and the colossal monuments of concrete that are now being erected on the Columbia River may become "white elephants" on the public's hands.

Therefore I would like to point out that the Dalles lock and dam project is not only ethically unfair to the Yakima Indians but economically unsound and an imposition on the taxpayers of the country.

DROP IN RIVER FLOW

Mr. DAVIDSON. When I was here last year I pointed out to you that the Bonneville Dam was seriously handicapped in production when the flow of the Columbia River receded. Last year gave us a beautiful example of this. The dry period was so extended that almost a state of emergency developed. Many of the power industries as well as the domestic users were drastically curtailed. That is not an unusual thing to happen when the flow of the river drops.

You are putting the Dalles Dam just 50 miles above Bonneville. It is going to be affected the same as Bonneville. I mean, by the flow of the water. The engineers have realized this. For that reason they have consistently recommended the development of storage dams in the upper river. Hell's Canyon and Libby are two, specifically.

We know now there is a very good opportunity that Hell's Canyon will not go in. The Interior has removed its objection and has recommended private development. Libby Dam may also not go in. Senator Martin, of Pennsylvania, has introduced a bill to rescind the authorization of Libby Dam. These two dams would store up millions of acre-feet of water. The purpose was to liberate these stored waters during the low flow of the river so as to firm up the power of the low river dams. That refers to Dalles as well as McNary and Bonneville.

Therefore, you may never have that storage. That means these lower river dams will be permanently handicapped for at least 4 months out of the year. To us it does not seem logical nor economical to put $350 million which is the figure now, into a dam which cannot operate effectively throughout the year.

No private power company could put that much money into a dam which would not produce its full capacity. So that is our plea.

We would like to call your attention to the talk about how the Dalles Dam would pay itself back through the production of power. Very seldom do we hear that the cost of this big boat lock going into the dam will be written off arbitrarily when the capitalization of the Dalles Dam is made on the basis of which it is to be paid back. That means you are giving to a small group who want to establish an old and antiquated method of river transportation a direct gift of millions of dollars.

No one would bring back the horse and buggy as a means of transportation. Yet you are doing the same thing every time money is appropriated for a lock in any of those lower Columbia River dams.

Senator CORDON. You do it wherever a lock is put in any stream? Is that not true, the same, of the Mississippi?

Mr. DAVIDSON. That may be true, but I would like to say this transportation system is in direct competition with the railroads which

are being affected by the competition of the truck transportation. It will only at best serve three States in the Union.

Senator CORDON. Is that not true of any interior water transportation?

RAILROAD OPPOSITION

Mr. DAVIDSON. No. There is a great deal of hesitation about the St. Lawrence Waterway which would not only serve the whole United States but Canada as well. If you hesitate on that, I cannot see how there is any logical reason to put millions into the lock at the Dalles Dam.

Senator CORDON. The railroads are the chief opponents, are they not?

Mr. DAVIDSON. That may be true. They are the chief opponents to the development of Columbia River transportation. They are losing money all the time.

Senator CORDON. There is no difference in that regard between a navigation improvement on the Columbia or any of the navigable waterways?

Mr. DAVIDSON. Except the others may serve more States.

That constitutes the main arguments in my thesis here. If it pleases you, I would like to answer Senator McClellan's question about the fish.

Senator MCCLELLAN. You depend on those salmon?

Mr. DAVIDSON. The salmon are a migratory fish. They do not live permanently in the rivers. So any lake dammed up will be of no particular benefit to them.

Senator MCCLELLAN. That is a different situation to our situation, but these dams greatly enhance the fishing sport in America.

Mr. DAVIDSON. You have a permanent resident fish, not a migratory fish.

Thank you.

Senator KNOWLAND. The next witness is Mr. Charles F. Luce.

THE UMATILLA INDIAN TRIBE, WALLA WALLA, WASH.

STATEMENT OF CHARLES F. LUCE, ATTORNEY

SETTLEMENT OF INDIAN RIGHTS AT CELILO FISHERY

Mr. LUCE. The clerk has told us the Umatilla Indians for whom I am tribal attorney have 10 minutes, and I wish to stay within that time. I shall take 5.

I am Charles Luce of Walla Walla, Wash. I appear here on behalf of the Umatilla Indians not to oppose the appropriations for the Dalles Dam, nor for that matter to advocate them, but for this limited purpose only: That if this committee appropriates further funds for the Dalles Dam, we ask that it appropriate the amounts requested by President Eisenhower in his budget for the settlement of Indian rights at the Celilo fishery that will be destroyed by this dam.

The Umatilla Indians, like the Warm Springs Indians, live in Oregon. There is evidence that they have signed a settlement contract with the United States Government through the Corps of Engineers providing for compensation of approximately $4 million to each of these tribes

for their rights at the Celilo fishery. That contract has been approved not only by the district engineer at Portland but by the Chief of Engineers, by the Commissioner of Indian Affairs, and by the Secretary of the Interior, Douglas McKay, who, being from Oregon, has considerable firsthand knowledge as to the problem there.

The agreement has also been informally cleared with the Justice Department.

There has been a statement made by Attorney Niebell for the Yakimas that the Corps of Engineers has adopted a dictatorial attitude toward the Indians. I wish to say that is absolutely not the case. Our experience has been that the Corps of Engineers have been most reasonable in dealing with the Indians who fish at Celilo Falls. I think far from being criticized for their approach to the problem, they are to be commended.

Mr. Niebell had something to say about the Yakimas having exclusive rights. This, of course, is not the place to argue that. The Army engineers are in charge of the acquisition of rights in the reservoir area, and they have seen fit to recognize the rights of the Umatillas and the Warm Springs as well as the Yakimas.

But I would call to the committee's attention in our prepared statement, which I asked be placed in the record, that we have cited the Brookfield fisheries case which holds that the Umatilla Indians have joint rights.

Senator KNOWLAND. That statement may go in the record in full.

(The statement referred to follows:)

STATEMENT OF THE CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION, OREG. (WALLA WALLA, CAYUSE, AND UMATILLA TRIBES OR BANDS) FOR THE PROTECTION OF THEIR INTEREST IN THE CELILO FISHERY, WHICH WILL BE DESTROYED BY THE DALLES LOCK AND DAM, THE DALLES, OREG. AND WASH.

Mr. Chairman, I have once again been sent here by my people, the Confederated Tribes of the Umatilla Indian Reservation, Oreg., to testify on the subject of appropriations for The Dalles Dam.

The Dalles Dam will destroy the great Celilo fishery, which was reserved to our tribes by our treaty of June 9, 1855. Article I of the treaty guarantees our people the perpetual right "of taking fish * * * at all usual and accustomed stations in common with the citizens of the United States, and of erecting suitable buildings for curing the same * * *."

The Celilo fishery has been a usual and accustomed fishing place of our people for hundreds of years, before the time when written history begins.

On March 10 of this year, our tribes signed a settlement agreement with the United States Government. As part of the cost of building The Dalles Dam, the Government agreed to pay us $4,198,000 for the loss of our interest in the Celilo fishery. This valuation of our interest is based upon a total appraisal of $23 million for the interest of all Indian tribes in Celilo. In turn, our tribes agreed to release all claims against the United States resulting from the construction of this dam.

We appear before your committee today to request that, if the Congress appropriates more money for building The Dalles Dam, it include a sum for the payment of the Government's obligation to our tribes under this contract.

We have attached a copy of the settlement agreement to this statement marked exhibit A. As you will see, the agreement calls for the payment to our tribes of $200,000 this year, and the rest at any time before the dam is finished.

In past years, our tribal delegates have come to Washington, D. C., to oppose The Dalles Dam. The Celilo fishery is the last of the valuable fisheries reserved by our treaty. We would rather have this treaty fishery for our people, and our children, and our children's children, than have any sum of money. Almost every able-bodied Indian on our reservation depends on this fishery for part of his family's food. More than half of our able-bodied Indians also depend upon this fishery for all or a large part of their cash income every year.

The Celilo fishery means more to us than food and money to pay our bills. It is where our ancestors have come to catch salmon for untold centuries. It is almost our last link with the ways of our fathers. Celilo is part of us, part of our people, part of our history.

We know that in the past 2 years the Congress has appropriated many millions of dollars for building The Dalles Dam. When we go to Celilo we can see the dam being built, day and night. The big shovels and the dump trucks never stop.

From this, our people have concluded that we cannot stop the Dalles Dam. The Congress has found the dam necessary for national defense. We must accept its decision.

The House committee twice has told the United States Army Corps of Engineers to settle the Indian fishing rights at Celilo Falls. In 1951, the House committee report said:

"The committee will not give further consideration to this project until the treaty matter is settled to the satisfaction of all parties concerned and until proper and final cost estimates are determined."

In 1952, the House committee report repeated this stand.

Our people, realizing their defeat, have done the next best thing, and have negotiated with the Corps of Engineers as to the value of our interest in the Celilo fishery. For about 15 months we negotiated at many meetings. Finally, on March 10, 1953, we signed the settlement agreement above referred to.

Our people trust that, when further money is appropriated for the Dalles Dam, the Congress will include the sum required by this settlement agreement, just the same as money appropriated for railroad and highway relocation, the destruction of the Seufert cannery, the flooding of privately owned farmland, or the damaging of any other valuable property or rights.

We understand that officials of the Army engineers have already told this committee how the total value of $23 million for the Celilo fishery, and the value of $4,198,000 for our particular tribes' interest in Celilo, were figured. So I will not discuss this subject, except to say that I think the United States Government is getting a very fair settlement for the taking of our treaty rights.

Look at it this way. In an effort to save the salmon run above Bonneville Dam, the Government plans to spend an estimated $142,627,000 for fish passage facilities, plus an annual estimated operating expense for these facilities of $1,235,000. We must therefore conclude that the salmon runs above Bonneville are at least this valuable to the Government. At the present time, the Indian fishery at Celilo takes 35 percent of the salmon that get above Bonneville Dam. When this Celilo catch is eliminated, the salmon runs above Bonneville should increase at least 35 percent, and probably more. If the United States Government would pay the Indians 35 percent of the value it has placed on the entire run, it would pay the Indians a $50 million lump sum, plus $435,000 per year.

Looked at another way, two fish experts employed by the Oregon Fish Commission have told the Federal Power Commission that the value of every spring chinook salmon that escapes to spawn in the Deschutes River, a few miles above Celilo, is $42. They also have said that the value of every steelhead that so escapes is $14. If we apply these values per fish to the salmon and steelhead that the Indians catch every year at Celilo, the annual value of the Celilo catch exceeds $4 million, and the total value of the fishery exceeds $130 million. Yet the United States Government will pay the Indians a total value of only about $23 million.

You may ask why we have agreed to accept our share of only $23 million if the Government values the fishery so much higher. It is because we are advised that the Government can pay us only for the value of the fishery to us in dollars and cents, and not for the incidental benefits that the Government will receive from taking the fishery, nor for the grief and pain that our people will feel when this fishery is gone.

Our people have given the settlement agreement careful consideration in many meetings. The majority are convinced that the settlement agreement is fair to us. We asked for a higher value, and we would like to receive a higher value. But still we think that the agreement is a fair measurement of our dollars-and-cents loss. If we must lose the fishery, we will stand by our agreement.

We understand that other Indian tribes have appeared or will appear before this committee. With out friends, the Warm Springs Tribes, we are in complete agreement. We do not know what claims our friends the Yakimas will make. In the past, they have made some claims that we believe are exaggerated. In case they argue against the treaty rights of our people at Celilo, I can assure the committee that they are wrong. Both the Corps of Engineers and the Department of the Interior have concluded that our people have valid treaty rights.

We also attach to this statement, as exhibit B, a legal opinion by our attorney which shows that the Celilo fishery was a "usual and accustomed fishing station" of our ancestors, within the meaning of our treaty of June 9, 1855.

We want every Indian tribe to be fairly dealt with. We are not opposed to any other Indian tribe being paid its fair share of the value of the Celilo fishery. They have all had the same chance as we have had to negotiate with the Army engineers. They still have that chance.

We thank your committee for the opportunity of appearing before it and explaining our tribes' viewpoints. Our people are confident of receiving fair treatment at the hands of the Congress. But as much as we appreciate your hearing us, we sincerely hope that this is the last trip that our tribal delegates will have to make to Washington, D. C., on this subject.

EXHIBIT A. AGREEMENT EXECUTED BY THE UNITED STATES OF AMERICA, DEPARTMENT OF DEFENSE, ACTING BY AND THROUGH THE CORPS OF ENGINEERS, U. S. ARMY, AND THE CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION, PENDLETON, OREGON

This Agreement made and entered into this 10th day of March 1953, by and between the United States of America (hereinafter called "the Government"), Department of Defense, acting by and through the Corps of Engineers, U. S. Army, represented by the contracting officer executing this agreement, and the Confederated Tribes of the Umatilla Indian Reservation of Pendleton, Oregon (hereinafter called "the Confederated Tribes"), acting by and through their official Board of Trustees, represented by the Chairman and the Secretary of the Board of Trustees, executing this agreement.

Witnesseth:

Whereas, under and by virtue of the Flood Control Act of 1950, Title II, Public Law No. 516, 81st Congress, 2d Session, approved May 17, 1950, the Corps of Engineers, Department of the Army, has been authorized to construct The Dalles Dam, Columbia River, Washington and Oregon (hereinafter called "the Project"), and

Whereas, the Confederated Tribes have been taking fish since time immemorial at the usual and accustomed fishing stations located within and adjacent to the Project, particularly in the vicinity of Celilo Falls, Columbia River, and since the ceding of their lands along the Columbia River to the United States the Confederated Tribes have been and now are taking fish at those usual and accustomed stations, in accordance with the reservation contained in Article I, Treaty of June 9, 1855, 12 Stat. 945, and

Whereas, said usual and accustomed fishing stations will be destroyed and inundated by construction of the Project, and

Whereas, it is the intent of the Government to compensate the Confederated Tribes for the destruction and inundation of those usual and accustomed stations by the construction, operation, and maintenance of the Project, and to avoid litigation; and the amounts set forth herein are considered just compensation for such destruction or inundation;

Now, therefore, for and in consideration of the premises and mutual benefits and advantages accruing hereunder to each of the parties, it is mutually agreed by and between the parties hereto as follows:

1. EXHIBITS

The following exhibits are attached hereto and by this reference hereby form a part of this agreement:

Exhibit A: Drawing, file number DDG–8–0–0/1, dated September 25, 1952, revised November 24, 1952, entitled "The Dalles Dam, Columbia River, Washington and Oregon, Reservoir Flowage Area Affecting Indian Fisheries," showing the area containing affected fishing stations of the Confederated Tribes.

Exhibit B: Form of resolution of the Board of Trustees authorizing execution of this agreement.

2. PAYMENT

(*a*) The Government will pay the total sum of $4,198,000 to the Confederated Tribes as full consideration for the destruction or inundation of these usual and accustomed fishing stations within the area shown by shading upon Exhibit A hereof and for the release and subordination hereinafter set forth in paragraph 5.

(*b*) The construction operations of the Government have permanently encroached upon a portion of those usual and accustomed fishing stations in the vicinity of and at the dam site of the Project. To compensate the Confederated Tribes for such encroachment, the Government will pay the Confederated Tribes on or before December 31, 1953, the initial sum of $200,000.00, in accordance with paragraph 2 (*d*) hereof and as part payment of the consideration required by paragraph 2 (*a*) hereof, and the Confederated Tribes do hereby subordinate the right to use those usual and accustomed fishing stations within the construction areas of the Project to the right of the Government to construct, maintain and operate the Project.

(*c*) The balance of the sum set forth in paragraph 2 (*a*) hereof will be paid in one lump sum on or before final closure of the dam or inundation of the fishing stations set forth in Exhibit A hereof, whichever occurs first.

(*d*) Payment shall be made by depositing the amounts, set forth in paragraphs 2 (*b*) and 2 (*c*) hereof, in the United States Treasury for the account of the Confederated Tribes, unless the Congress shall direct a different manner of payment, in which event payment shall be made in accordance therewith.

(*e*) No payments will be made under the agreement for the real or personal property of individual members of the Confederated Tribes or for removal of cemeteries or burial grounds. It is recognized, however, that the cost of construction of temporary fishing platforms at the Indian fisheries is an item of fishing expense incurred by the individual members of the Confederated Tribes, but since the cost of said temporary fishing platforms has been considered and evaluated in arriving at the tribal value set forth in paragraph 2 (a) above, it is agreed that no separate or additional payment will be made by the Government to the individual members of the Confederated Tribes for the cost of constructing or removing temporary fishing platforms as distinct from any compensable interest which individual members of the Confederated Tribes may be able to establish in permanent cableways and appurtenances.

(*f*) All of the obligations of the Government under this agreement shall be subject to action by the Congress either authorizing payment to the Confederated Tribes for destruction of the fishing stations covered by this agreement or an act appropriating Project funds for this purpose as shown by the language of such act or acts or the entire legislative history thereof.

3. PRECLOSURE FISHING

(*a*) Upon 30 days' posted notice of a determination by the contracting officer or his duly authorized representative that the use of any fishing station or stations herein involved will interfere with the construction, operation, or maintenance of the Project, the Confederated Tribes and individual members thereof will promptly vacate and cease to utilize said station or stations. In the absence of such determination, the Confederated Tribes and individual members thereof may continue to use such station or stations subject only to such regulations as may be promulgated by the contracting officer to avoid interference with the construction, operation, or maintenance of the Project.

(*b*) It is presently planned to start construction of the final closure fill of the dam in October 1956 and by April 1957, to raise the reservoir pool to elevation 155 mean sea level, U. S. C. and G. datum, and shortly thereafter to elevation 160 mean sea level, U. S. C. and G. datum. However, these dates and elevations are tentative and are subject to change depending on the progress of construction If circumstances require it, the contracting officer will from time to time revise the above dates and will advise the Confederated Tribes of the revisions. The contracting officer will give notice at least six months in advance by registered mail to the Chairman of the Board of Trustees mailed in care of the Superintendent of the Umatilla Indian Agency, Pendleton, Oreg., which shall be construed as notice to the Confederated Tribes and individual members thereof of the date on or after which final closure of the dam will be made.

4. SHARING OF OTHER BENEFITS

In the event that the contracting officer in connection with the construction, operation, and maintenance of the Project, subsequent hereto provides noncash benefits of any kind whatsoever to any other Indian Tribe, group, or band, he shall likewise, in addition to payments provided in paragraph 2 hereof, provide the Confederated Tribes with similar and equal noncash benefits, or with the right to share such noncash benefits on a like or uniform basis with such other tribe, group or band. In the event that the contracting officer agrees through

negotiations to provide noncash benefits to any other Indian Tribe, group, or band as part consideration, and in lieu of their proportionate share of the total value of the fishery thus reducing their per capita share of the settlement it is agreed that the Confederated Tribes will not share in the use of the noncash benefits thus provided without a corresponding reduction in the payment provided in paragraph 2 hereof.

5. RELEASE AND SUBORDINATION

The Confederated Tribes, for and in consideration of performance by the Government of the obligations and terms hereof to be kept, observed and performed by the Government, by these presents for themselves and their agents, assigns or successors and for their people and their descendants forever, do hereby subordinate the rights of the Confederated Tribes to take fish at those usual and accustomed stations within the areas as shown shaded on Exhibit "A" hereof, as reserved in the Treaty of June 9, 1855, 12 Stat. 945, to the right of the Government to construct, maintain, and operate the project, and do hereby release and forever discharge the Government, its officers and agents, of and from all manner of action and causes of action, suits and causes of suit, debts, damages, charges, expense, claims and demands whatsoever, which the said Confederated Tribes or their agents, assigns or successors or their people or their descendants may now or hereafter have by reason of or resulting from the construction, operation, and maintenance of the Project, excepting only the rights of individual Indians to compensation for damages to tangible property, individually owned, other than temporary fishing platforms. The Confederated Tribes on behalf of themselves and their agents, assigns, or successors and for their people and their descendants forever, do hereby further release the Government, its officers and agents, of and from all further manner of action and causes of action, suits and causes of suit, debts, damages, charges, expense, claims and demands whatsoever, arising on account of injury to or adverse affect on those usual and accustomed stations within the area as shown shaded on Exhibit "A."

6. INTEREST OF MEMBER OF CONGRESS

No member of or delegates to Congress or resident commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

7. TERMINATION

(*a*) In the event that Congress does not appropriate funds in fulfillment of the Government's obligation under paragraph 2 (*b*) above or in the event that the Congress directs some other method of settlement with the Confederated Tribes either party to this agreement may elect without prejudice to terminate the agreement on written notice, and in the further event that payment under said paragraph 2 (*b*) is not made by December 31, 1953, the Confederated Tribes may elect to declare this agreement terminated and may pursue any and all remedies afforded them by the Constitution, statutes or laws of the United States for any and all damages that have occurred or any additional damages that may have been caused them by the construction or partial construction of the Project

(*b*) In the event that Congress does not appropriate additional funds to meet the obligations of the Government under this agreement prior to final closure of the dam or in the event that the Congress does not appropriate funds to continue the Project for a period of five years from the latest appropriation for Project purposes, then the Confederated Tribes may elect to declare this agreement terminated except as to the subordination of the rights of Confederated Tribes set forth in paragraph 2 (*b*) hereof, may retain the $200,000 paid them under paragraph 2 (*b*) hereof, and may pursue any and all remedies afforded them by the Constitution, statutes or laws of the United States for any additional damages that may have been caused by the construction or partial construction of the Project.

(*c*) In the event this agreement is terminated under any termination provision contained hereinabove, this agreement or any provision thereof shall not be considered or used against any interest or right, present or future, of either party hereto, and, provided further, that said agreement shall be considered as being without prejudice to either party hereto regardless of the nature of any action which may be undertaken subsequent to termination hereof.

8. LEGAL FEES

No moneys appropriated for payments under this agreement shall be used to pay for legal fees, except in accordance with the terms of attorney contracts made, with the approval of the Secretary of Interior or his duly authorized representative, by the Confederated Tribes; unless the Congress shall direct a different manner of determining the attorneys' fees, in which event money appropriated may be used in accordance therewith.

9. EQUALIZATION OF PAYMENTS

Inasmuch as the payments to be made under this agreement have, in general, been predicated upon a division of the total value of the Celilo fishery distributed to the tribes concerned on a per capita basis, the amount of compensation required in paragraph 2 (*a*) hereof to be paid to the Confederated Tribes is based on a population of 1,118 members and would permit payment of $3,754.91 to each member. In the event that the Government shall agree, through negotiation, to subsequently pay the Yakima Tribes an amount which, if distributed on a per capita basis to their present 3,637 members, would permit larger per capita payments to each member, it is agreed that the Government will, in the manner provided in paragraph 9 (*d*) hereof, pay the Confederated Tribes, in addition to the payment provided in paragraph 2 (*a*) hereof, such additional amounts as would permit them to realize the same per capita payments as that agreed to with the Yakima Tribes.

10. RESTRICTIVE FISHING

It is mutually recognized that fishing in the immediate vicinity of the dam, powerhouse, locks, and fishways, as determined by the Contracting Officer, will interfere with the construction, operation, or maintenance of the Project, and will not be permitted after final closure and inundation.

11. USE AS EVIDENCE

It is agreed that neither the consideration provided for by this agreement, nor the agreement itself (or any part thereof) shall be offered in evidence or referred to by the plaintiff in any suit now pending or hereafter filed by any Indian tribe, band or group against the United States excepting only a suit to enforce any obligation under this agreement.

12. DEFINITIONS

Except for the original signing of this agreement and except as otherwise stated herein, the term "contracting officer" as used herein shall include his duly appointed successor or his authorized representative.

13. APPROVALS

This agreement shall be subject to the approval of the Chief of Engineers, Department of the Army, the Commissioner of Indian Affairs and the Secretary of Interior, Department of Interior, or their duly authorized representatives, and shall not be binding until so approved.

It is understood and agreed by the parties hereto that this agreement will be executed in triplicate with one copy for the Confederated Tribes and two for the Government.

In witness whereof, the parties hereto have executed this agreement at Pendleton, Oreg., by their respective representatives and officers thereunto duly authorized, as of the day and year first above written.

THE UNITED STATES OF AMERICA,
By /s/ T. H. LIPSCOMB, *Colonel, Corps of Engineers, Contracting Officer.*
Witnesses:
/s/ THOMAS J. BALLEN,
/s/ PERCY M. OTHUS,
/s/ FORD E. ABRAHAM.

THE CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION, acting by and through their Board of Trustees
By /s/ LOUIS MCFARLAND, *Chairman.*
/s/ ELIAS J. QUAEMPTS, *Secretary.*
Witnesses:
/s/ DAVID S. HALL,
/s/ EVA U. REMILLARD,
/s/ ANNA WANNASSAY.

Approved by Tribal Counsel:
[s] Charles F. Luce
CHARLES F. LUCE

The undersigned [s] Elias J. Quaempts, Secretary of the Board of Trustees of the Confederated Tribes named as a party of this agreement, and [s] Richard D. Butts, Superintendent of the Umatilla Indian Agency, Bureau of Indian Affairs, Department of Interior, do hereby certify that on the 12 day of March, 1953, the duly elected, qualified, and acting Chairman and Secretary of the Board of Trustees duly signed this agreement for and on behalf of said tribes by virtue of a resolution approved by a majority of the voting members of the Board of Trustees at a regular meeting held on March 6, 1953, authorizing the execution of this agreement.

IN WITNESS WHEREOF, we hereunto affix our hands and seals, this 12 day of March, 1953.

[s] ELIAS J. QUAEMPTS,
Secretary, Board of Trustees.
[s] RICHARD D. BUTTS,
Superintendent Umatilla Indian Agency.

Approved:
By ——— ———,
Chief of Engineers,
Corps of Engineers.
By ——— ———,
Commissioner of Indian Affairs,
Department of Interior.
By ——— ———,
Secretary of Interior,
Department of Interior.

EXHIBIT B.—CERTIFICATE

The undersigned, Elias J. Quaempts, Secretary of the Board of Trustees of the Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Oregon, and Richard D. Butts, Superintendent of the Umatilla Indian Agency, Bureau of Indian Affairs, Department of the Interior, United States of America, do hereby certify that on the 12 day of March, 1953, the duly elected, qualified, and acting Chairman of said Board of Trustees was Louis McFarland and that the duly elected, qualified, and acting Secretary of said Board was Elias J. Quaempts:

That the personal signature of said Chairman and Secretary are as follows:

Louis McFarland, Chairman.

Elias J. Quaempts, Secretary.

That on the 6th day of March 1953 a regular meeting of the said Board of Trustees was held upon due notice in the Board's Room at the office of the Umatilla Indian Agency; that as shown by the offici minutes of the meeting the following duly elected, qualified, and acting members of the Board of Trustees, constituting a quorum thereof, were present and acting throughout: Elias J. Quaempts, Maudie Antoine, Edgar Forest, Jr., Anna Wannassay, Joseph T. Johnson, Joseph Sheoships, David S. Hall, and Louis McFarland; that at said meeting the following resolution was regularly moved, seconded, and unanimously adopted.

"*Resolved*, That the Confederated Tribes of the Umatilla Indian Reservation hereby enter into that certain Agreement with the United States of America, Department of Defense, Corps of Engineers, U. S. Army, for compensation to the said Confederated Tribes for the subordination or loss of fishing sites and easements resulting from the construction, operation, or maintenance of The Dalles Dam project, which Agreement is attached hereto as a part hereof;

"*Resolved, further*, That the Chairman and Secretary of the Board of Trustees are hereby authorized to execute and deliver to the Corps of Engineers as many copies of said Agreement as they may deem necessary."

That said resolution was duly and regularly adopted in all respects, and is legally binding upon the said Confederated Tribes; and that said resolution has not been rescinded or amended, and still is in full force and effect.

In witness whereof, we have hereunto placed our hands and seals this 12 day of March, 1953.

ELIAS J. QUAEMPTS,
Secretary, Board of Trustees, Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Oregon.

RICHARD D. BUTTS,
Superintendent, Umatilla Indian Agency, Bureau of Indian Affairs, Department of the Interior, United States of America.

EXHIBIT B

WALLA WALLA, WASH., *March 12, 1953.*

Mr. PERCY OTHUS,
Special Assistant, Office of Portland District Engineer, Corps of Engineers, United States Army, Portland, Oreg.

DEAR MR. OTHUS: In accordance with our recent conversation, I send you herewith a recompilation of legal and historical data relative to the use of the Celilo fishery by the Confederated Tribes of the Umatilla Indian Reservation, which are comprised of the Walla Walla, Cayuse, and Umatilla tribes or bands.

The most direct and pertinent reference to such use that we have fund is the report of an Army survey team that went through the mid-Columbia country in about 1852–53, seeking a feasible railroad route from the east to the Pacific Ocean. This team reported their observations of the Walla Walla Indians as follows:

"The head chief of the Walla Walla is Pu-pu-mux-mux, or the Yellow Serpent, an old man who generally makes his residence near Fort Walla Walla. * * * They, as well as their neighbors, the Nez-Perces, own large bands of horses which roam at large over the hills south of the Columbia, and their principal wealth consists in them. There is no wood in their country, and they depend on the drift brought down by the stream for their fuel. Their very canoes are purchased from the Spokanes. They move about a great deal; generally camping in winter on the north side of the river. Their fisheries at The Dalles and the falls, 10 miles above, are the finest on the river. The parties of my exploration passed through the Walla Walla country on its return route. I had much personal intercourse with the Walla Walla chief" (U. S. War Department, Report of Explorations and Surveys to Ascertain a Railroad Route, etc. (1855), vol. I, at p. 403; and see, also, p. 407).

Additional significance is given this description of the Walla Walla Indians under Pu-pu-mux-mux, and their Dalles fisheries, by the fact that Gov. Isaac I. Stevens adopted this description haec verba, in his report to the Secretary of the Interior the year before he negotiated the treaty of June 9, 1855 (12 Stat. 945) (Annual Report of the Department of the Interior for 1854, p. 392, etc.).

It is true that not all of the Walla Walla Indians were included in the treaty of June 9, 1855. The so-called lower Deschutes, upper Deschutes, and John Day River bands of Walla Wallas were grouped with the Middle Oregon Indians under the treaty of June 25, 1855 (12 Stat. 963). However, the context of the above quotation—the references to "their neighbors, the Nez-Perces," their winter camps "on the north side of the river," and their trade with the "Spokanes," who lived north of the Snake River—make it clear that the quotation is describing the Walla Wallas who signed the June 9, 1855, treaty. The clinching fact is that the head chief of the Walla Wallas who signed the June 9, 1855, treaty was the same Pu-pu-mux-mux to whom the quotation twice refers.

Less direct, but nevertheless significant, is the study of Verne F. Ray, well-known anthropologist, entitled "Tribal Distribution in Eastern Oregon and Adjacent Regions," published in the American Anthropologist (vol. 40, No. 3, July–September 1938). This study shows that in 1850 the boundaries of the Umatillas had pushed within a few miles of the Celilo fishery—so close that it is certain that the Umatillas would have utilized this fishery at certain seasons of the year.

The other historical data upon which we have relied are the affidavits of the old Walla Walla, Cayuse, and Umatilla chiefs taken by Edward G. Swindell as part of the study entitled "Report on Source, Nature, and Extent of the Fishing, Hunting, and Miscellaneous Related Rights of Certain Indian Tribes in Wash-

ington and Oregon" (Office of Indian Affairs, July 1942). The Indians who gave these affidavits were sons and grandsons of Indians who signed the June 9 1855, treaty, and they stated without exception that their forefathers had used the Celilo fishery as a usual and accustomed station.

I will not detail the contents of the various legal materials on this subject, but will enumerate the principal ones with breif reference to their chief significance:

1. *U. S.* v. *Winans* (198 U. S. 371), holding that the treaty language "in common with citizens" does not place the Indians in an equal position with whites, but that the Indians nevertheless occupy a preferred position to whites.

2. *Seufert Bros.* v. *U. S.* (249 U. S. 194), holding that the right to fish at usual and accustomed stations is not limited to stations within the ceded areas, and that the right to fish at Celilo locations is not exclusively a Yakima Indian right.

3. *Tulee* v. *State of Washington* (315 U. S. 681), reaffirming the Winans and Seufert cases, and holding that the State cannot tax the exercise of Indian treaty fishing rights.

4. *U. S. as trustee for the Yakimas, Umatillas, Cayuse, Walla Walla, and Nez Perce Tribes* v. *Brookfield Fisheries, Inc., et al.* (24 Fed Supp. 712), holding that the Umatillas, Cayuse, Walla Wallas, and Yakimas have joint treaty rights to fish on the "channel" at Celilo, but that there was no evidence that the Nez Perce had such rights.

5. Bylaws of the Celilo Fishing Committee, adopted circa 1935 by the Yakima, Warm Springs, Umatilla, and Celilo Indians, and approved by the Commissioner of Indian Affairs, establishing a committee composed of representatives of the Yakima, Warm Springs, Umatilla, and Celilo Indians for the purpose, inter alia, of settling disputes between members of these tribes as to their respective rights to use certain fishing locations at the Celilo fishery.

6. Public Law 841 (1948) (61 Stat. L. 460, 466), appropriating moneys to purchase lands at Celilo "for the use of the Yakima Indian Tribes, the Umatilla Indian Tribes, the Confederated Tribes of the Warm Springs Reservation, and other Columbia River Indians affiliated with the aforementioned Tribes and entitled to enjoy fishing rights at their old and accustomed fishing sites at * * * Celilo Falls."

7. Laws of Oregon, 1947, chapter 239, exempting from certain commercial fishing regulations "all Columbia River Indians who are eligible to hunt and fish under the terms of the Treaty of 1855 between the Columbia River Indians and the United States of America."

8. Opinion No. 1273, Opinions Attorney General of Oregon, November 3, 1949, holding that the Yakima, Umatilla, and Warm Springs Indians have treaty rights within the meaning of this chapter 239.

If there is any additional information of this type that you wish us to provide, please let me know.

Sincerely yours,

CHARLES F. LUCE.

YAKIMA RIGHTS DISPUTED

Mr. LUCE. I have here the entire judgment which completely denies the contention the Yakimas have exclusive rights.

Senator KNOWLAND. That may be filed with the clerk of the committee for the information of the committee.

Mr. LUCE. I noted in the Yakima brief they overlooked that case.

In closing I would like to say we have negotiated this contract between the Umatillas and the Government over about a year and a half or 2 years of time. The Umatilla Indians acted in good faith. The contract is binding on them. We take the position it is binding on the United States, and like any other contract it is entitled to appropriations.

It so happens the Yakimas do not oppose our contract. That completes my statement, gentlemen, unless there are any questions.

Senator MCCLELLAN. I would like to inquire if the Yakima Tribe is the only opposition to this project. Do you know? Is there any other opposition to the project except from the Yakima Tribe?

Mr. LUCE. I cannot speak for any Indians but my own clients. They have determined not to oppose any further.

Senator MCCLELLAN. I wonder if the Corps of Engineers could answer that.

Senator KNOWLAND. Is there any other group other than the Yakimas?

Colonel PAULES. So far as I know, only the Yakimas.

Mr. LUCE. I would like to introduce Mr. Louis McFarland.

CONFEDERATED UMATILLA INDIAN TRIBE

STATEMENT OF LOUIS McFARLAND

CONTRACT NEGOTIATION

Mr. MCFARLAND. Mr. Chairman and gentlemen, you saw me here last year when I appeared. At that time I brought my problems up here for the Umatillas. Our problem at that time was to oppose the dam. Since that time we have had meetings, and we finally agreed that the dam could not be stopped. So rather than lose everything we have done that way, we thought it would be a good thing to negotiate.

The Army engineers representing the Government came right in and asked us to get together with them. We got together for this. We finally came down to an agreement and signed a contract with the United States Government through the Corps of Engineers which I hope Congress will see takes care of our Indians.

Our people are patriotic like everybody else in this country. So they see if this dam is for national defense, let it be so, then. I have no written statement. I think my attorney has done that already, so I will have to pick up behind him.

Senator KNOWLAND. How many of you are on the negotiating committee?

Mr. MCFARLAND. Sometimes there were 6 or 7. Sometimes I was alone with my attorney here. We have been opposing that dam for quite a while. We first sent our representative in 1943 here to oppose the dam. Since that time things have changed, so now we are agreeable to everything. We are not opposing anybody else's agreement; we are not opposed to anybody's statements. It is my peoples' wish they be settled with.

Senator MCCLELLAN. When you say you for years opposed this dam, is that correct?

Mr. MCFARLAND. My tribe has been opposed to it since we first heard of the dam. That was in 1943. There was a large meeting here.

Senator MCCLELLAN. You opposed it for quite a long time, until now?

Mr. MCFARLAND. Until last year.

Senator MCCLELLAN. Now you have made a settlement?

Mr. MCFARLAND. Since that time my people have seen they cannot stop the dam.

Senator MCCLELLAN. Do you feel that you have been coerced into a settlement or that you finally, taking all things into account and the progress of the country and the necessity for this dam for other pur-

poses, felt it was wise to yield to progress and therefore accept a reasonable settlement and permit the dam to be built without your further opposition?

Mr. McFARLAND. I believe in our negotiations that the Army engineers were quite patient with us. They were quite friendly with us in this settlement.

Senator McCLELLAN. Irrespective of the settlement, do you feel probably this project is one of essential progress to the country?

Mr. McFARLAND. Yes.

Thank you.

Senator KNOWLAND. Thank you very much.

We will now hear from Mr. T. Leland Brown.

THE CONFEDERATED INDIAN TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

STATEMENT OF T. LELAND BROWN, REPRESENTATIVE

CONTRACT NEGOTIATION

Mr. BROWN. Mr. Chairman and members of the committee, I take this opportunity to thank you for permitting us to appear before you again. Last year when we appeared before you we announced at that time that the Confederated Tribes of Warm Springs withdrew their opposition to the construction of the Dalles Dam with the understanding it was necessary for national defense. We were then negotiating a contract, and I can now announce to you that the tribal council has approved a contract with the Army engineers representing the United States Government.

CONTRACT APPROVAL

On Wednesday, May 14, this contract was approved by the Commissioner of Indian Affairs and the Secretary of the Interior. The compensation provided for the payment of the loss of the Indian fishery by inundation of the waters of the Dalles Dam pool must be approved by Congress. It is our understanding there is included in the Dalles Dam appropriation item the figure of $1 million as initial payment to the Indians.

Out of that initial payment it is provided in the contract that the Warm Springs Indians are to receive an initial payment of $200,000 by December 31, this year. The balance of the compensation is to be paid when the fishing sites have been inundated by the waters of the Columbia River after the dam has been closed.

We have two Indian witnesses and my associate here to testify.

Senator KNOWLAND. Do you have a statement?

Mr. BROWN. I would like to have entered into the record the statement we gave to the clerk.

(The statement referred to follows:)

STATEMENT OF THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

IDENTITY OF WITNESSES

Witnesses appearing before the committee are the undersigned, Charles Jackson and Frank Suppah, duly elected by the general council and approved by the tribal council to appear and speak for the Confederated Tribes of the Warm Springs Reservation of Oregon, a Federal corporation chartered March 31, 1938, by the Secretary of the Interior under the act of June 18, 1934 (48 Stat. 988).

HISTORICAL ORIGINS OF THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

Historically the members of the Confederated Tribes of the Warm Springs Reservation of Oregon were not known as Warm Springs Indians but were the tribes and bands of Indians of middle Oregon occupying the area in north-central Oregon between the summit of the Cascade Range on the west and the Blue Mountains on the east. The Government first treated with the forebears of the Confederated Tribes of the Warm Springs Reservation of Oregon when Joel Palmer, Superintendent of Indian Affairs of the Oregon Territory, caused to be assembled at The Dalles all the tribes and bands of Indians of middle Oregon and after council meetings imposed upon the Indians the treaty of June 25, 1855. By that treaty the tribes and bands of Indians in middle Oregon were removed to their present reservation area in central Oregon, approximately 70 miles south of the Columbia River. By that treaty there was also reserved to the Indians the right of taking fish at all the usual and accustomed Indian fishing stations in and along the Columbia River and its tributaries within the ceded area.

The tribes and bands of middle Oregon signing the treaty of June 25, 1855, were the Ta-ih or Upper Deschutes Band of Wallawallas, the Wyam or Lower Deschutes Band of Wallawallas, the Tenio Band of Wallawallas, the Dock-spus or John Day's River Band of Wallawallas, the Dalles Band of Wascoes, the Ki-gal-twal-la Band of Wascoes, and the Dog River Band of Wascoes. The principal Indian fishery was and is located at Celilo, 12 miles east of the city of The Dalles on the Columbia River. Celilo was the home of the Wyam Tribe and the principal fishery of all the treaty tribes above named.

Other Indian dipnet fisheries located downriver in the vicinity of Cascade locks were flooded and destroyed by the reservoir created by the construction of Bonneville Dam. The Celilo fishery is the only remaining Indian dipnet fishery of any significance on the Columbia River.

ATTITUDE OF THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON WITH RESPECT TO THE CONSTRUCTION OF THE DALLES DAM AT THE DALLES, OREG.

The Confederated Tribes of the Warm Springs Reservation of Oregon were opposed to the construction of a dam across the Columbia River at The Dalles, Oreg., because such construction would mean the loss of their principal fishery. Representatives of the Warm Springs Indians appeared before the congressional committees considering appropriations for the Dalles Dam and made known the objections of the Warm Springs Indians to the construction of the Dalles Dam. It was determined by the Congress that the dam at The Dalles was to be built, and that it was necessary to the national defense. After that determination was made by the Congress the Warm Springs Indians, in a statement submitted to the Subcommittee on Civil Functions, Department of the Army, of the Senate Committee on Appropriations, withdrew their objections to the construction of the Dalles Dam upon the condition that the Warm Springs Indians should be justly and adequately compensated for the loss of the Celilo fishery, the greatest Indian fishery in the United States.

NEGOTIATIONS FOR COMPENSATION TO THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON FOR THE LOSS OF THE CELILO FISHERY

Commencing in October 1951, representatives of the Warm Springs Indians and attorneys for the Warm Springs Indians commenced negotiations with the district engineer in Portland, Oreg., to arrive at a valuation of the Indian fishery at Celilo and to agree upon a sum to be paid to the Warm Springs Indians as compensation for the loss of their fishery. The Oregon Fish Commission and the

Washington State Department of Fisheries had made joint cooperative studies of the Indian dipnet fishery at Celilo Falls on the Columbia River. The results of the studies and statistical analyses of the Oregon Fish Commission and the Washington State Department of Fisheries were published November 1951 in a document entitled "The Indian Dipnet Fishery at Cecilo Falls on the Columbia River, Contribution No. 17. The statistics of the Oregon Fish Commission and the Washington State Department of Fisheries were the primary basis upon which the Indian fishery at Celilo was appraised, and the statistics used were tested and proved by other independent studies conducted by the Fish and Wildlife Service of the Federal Government. A total value of approximately $23,270,000 was placed upon the fishery by the netotiating parties. This value was computed by determining the average annual value of all fish caught at Celilo to be $698,210 and by capitalizing that annual value at 3 percent. The negotiating parties agreed to a distribution of the total value of the fishery among the tribes considered as having compensable interests in the fishery on the basis of the populations of the principal tribes; to wit, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation of Oregon, and the Confederated Tribes of the Yakima Indian Reservation of Washington.

Deductions were made from the total value of the fishery in order that sums could be available to compensate a small unorganized group of unaffiliated Indians descendant from but not enrolled or affiliated with any of the treaty tribes who were felt to be equitably entitled to some compensation because of their long residence at the Indian fishery at Celilo. The compensation to which the negotiating parties determined the Warm Springs Indians to be entitled was $4,047,800, being approximately 20 percent of the total value of the fishery after deductions for other Indians considered to be equitably entitled to compensation. The total value of the Celilo fishery arrived at by the negotiating parties was substantially the same as the determination by the Oregon Fish Commission and the Washington State Department of Fisheries that the Celilo fishery had an annual value of $700,000 and a total value of $23 million. The Warm Springs Indians felt that they were entitled to substantilly greater compensation because the statistics available did not take into account a large quantity of fish taken for subsistence consumption and with respect to which there has been no complete or accurate record. The difficulty of making accurate proof of subsistence fishcatch and consumption caused the negotiating parties to agree upon the lesser figure. Attached hereto as exhibit A–1 is the statistical compilation showing the quantity of the Indian fishcatch at the Celilo fishery. Attached hereto as exhibit A–2 is the statistical compilation showing the values of the Indian fishcatch. Attached hereto as exhibit A–3 is the summary tabulation showing the average annual value of the total Indian fishcatch at the Celilo fishery.

CONTRACTS AS FINALLY NEGOTIATED

After many drafts of agreement had been written and rejected in whole or in part, the Corps of Engineers, acting for the United States of America, Department of Defense, by their contracting officer, the district engineer at Portland, Oreg., entered into a written agreement with the Confederated Tribes of the Warm Springs Reservation of Oregon on December 8, 1952. By the terms of that agreement the Government undertook to pay $4,047,800 to the Confederated Tribes of the Warm Springs Reservation of Oregon as full consideration for the destruction or inundation of the fishing stations at Celilo and within the reservoir area of the Dalles Dam pool. Of the total consideration, it was agreed that $200,000 should be paid on or before December 31, 1953, as compensation for the losses which have already been sustained by the Indians through construction work at the Dalles Dam site. The balance of the compensation is to be paid at or before the closure of the dam or the flooding of the fisheries, whichever first occurs. By the agreement the Confederated Tribes agreed to subordinate their fishing rights and to grant a complete release to the Government of all damages, charges, expenses, claims and demands whatsoever resulting from the construction, operation and maintenance of the Dalles Dam. It was further agreed that, because the payments to be made under the agreement were predicated upon a division of the total value of the Celilo fishery distributed to the tribes on the basis of their proportionate population, the amount of compensation to be paid the Warm Springs Indians based upon their population of 1,078 members would be increased in the event that the Confederated Tribes of the Yakima Indian Reservation of Washington were subsequently to negotiate a settlement for a

sum which would be disproportionate based upon the population of the Yakima tribes.

The provisions with respect to the Yakima tribes was considered essential because of the three major treaty tribe organizations only the Yakimas have failed to participate in the negotiations for compensation for the loss of the Celilo fishery. The agreement as signed December 8, 1952, was expressly made subject to approval by the Secretary of the Interior, the Commissioner of Indian Affairs, and the Chief of Engineers. The office of the Chief of Engineers requested some changes in the agreement with the Warm Springs Indians, and the changes required were incorporated in a second agreement signed March 10, 1953, which contained the same provisions with respect to the amount of compensation, the dates of payment, and the provision for equalizing payments to the Warm Springs Indians in the event of a subsequent disproportionate settlement with the Yakima tribes. A copy of the agreement executed by the United States of America, Department of Defense, acting by and through the Corps of Engineers, United States Army, and the Confederated Tribes of the Warm Springs Reservation of Oregon, as executed on March 10, 1953, is attached hereto as exhibit B.

The Confederated Tribes of the Warm Springs Reservation of Oregon are assured that the agreement as signed under date of March 10, 1953, was approved by the Chief of Engineers, Department of Defense, April 15, 1953, and has been favorably reviewed by the Department of the Interior. Formal endorsement of approval by the Secretary of the Interior and by the Commissioner of Indian Affairs is expected soon. Because of the importance of the subject of the contract, the constitution of the Confederated Tribes of the Warm Springs Reservation of Oregon requires that the action of the tribal council in entering into the agreement be submitted for ratification by vote of all members of the tribe in a referendum election to be called for that purpose after the agreement has been finally approved by the Secretary of the Interior.

Because the termination has been made by the Congress that the construction of the Dalles Dam is necessary and the dam is actually well in the course of construction, the people of the Confederated Tribes of the Warm Springs Reservation of Oregon have come to appreciate the fact that they are being dealt with in open negotiations designed to reach a willing agreement, and the good faith attitude of the representatives of the Government in those negotiations has done much to persuade the Warm Springs Indians to approve the contract for money compensation and to ease the disappointment of the Indian people over the loss of their fishery.

OTHER TRIBES AND ORGANIZATIONS TO RECEIVE COMPENSATION

A small number of Indians, already mentioned, who are descendant from treaty tribe Indians but who are not enrolled or affiliated with any organized tribe, live in an Indian village known as Celilo Village on the south bank of the Columbia River at the site of the Celilo fishery. These Indians take fish at the Celilo fishery, and in the opinion of the Warm Springs Indians the Indians living in the Celilo Village who are not enrolled or affiliated with any organized tribe are equitably entitled to some compensation which will give them substantially the same compensation for their loss as will be received under the present agreement by Indians enrolled in the Confederated Tribes of the Warm Springs Reservation of Oregon. So far as is known to the Warm Springs Indians, the only present obstruction to a contractual agreement by the Government with the group of unenrolled and unaffiliated Indians in the Celilo Village is the fact that they are as yet without any legal organization with which the Government could contract.

The Confederated Tribes of the Yakima Indian Reservation of Washington have not entered into any negotiations for compensation for the loss of their interest in the Celilo fishery. The Warm Springs Indians believe that historically the Celilo fisheries were not used by the Yakima tribes. However, the Warm Springs Indians recognize that since the early removal of their forebears to reservations in 1855 and in years following some members of the tribes and bands of middle Oregon who did fish at Celilo were removed to the Yakima Reservation and enrolled as members of the Confederated Tribes of the Yakima Indian Reservation of Washington, and through the years there has been intermarriage by the people of the three major treaty tribes, so that equitably the Yakimas may be entitled to their fair proportionate share of the value of the Celilo fishery. Public statements of representatives of the Yakima Indians indicate that the Yakimas are disposed to claim complete ownership of the Celilo fishery based upon a contention that the Warm Springs Indians relinquished their treaty fishing rights by the

treaty of November 15, 1865. By that treaty the Warm Springs Indians were to receive the sum of $3,500 in exchange for their agreement to remain on the reservation and to go to and from their fisheries in the Columbia River only with the permission of the superintendent of the reservation as evidenced by a written pass. There was no understanding or intent on the part of the Warm Springs Indians that the treaty of 1865 should deprive them of their treaty fishing rights, and there has never been any action on the part of the Government to so interpret the treaty of 1865 or to deprive the Warm Springs Indians of their treaty fishing rights. In 1888 the Commissioner of Indian Affairs submitted, through the Secretary of the Interior, to the House of Representatives a report of investigation with respect to the circumstances of the 1865 treaty in which it was clearly set forth that all investigations disclosed that the Indians had never agreed by the treaty of 1865 to the relinquishment of their fishing rights in the Columbia River. A copy of Executive Document No. 183, Volume 26, House of Representatives Executive Documents for the 1st Session, 50th Congress, 1887, 1888, is attached as exhibit C.

The Federal Government at all times since the treaty of November 15, 1865, has recognized the rights of the Warm Springs Indians to take fish at their usual and accustomed fishing sites at Celilo as those rights were secured by the treaty of June 25, 1855.

12 STAT., TREATIES, 37

Federal funds were appropriated in the year 1888 to enable the Secretary of the Interior to purchase land at Celilo of sufficient area and in such locality as to afford suitable facilities for the Warm Springs Indians to take fish from the Columbia River and to properly cure the same.

25 STAT. 235

Thereafter in 1917 Federal funds were appropriated to be immediately available for the purchase of a tract or tracts of land on the Columbia River to provide fishing grounds for the Warm Springs Indians and other middle Oregon tribes.

39 STAT. 986

In 1929 the Federal Government transferred to the Secretary of the Interior for the use and benefit of the Warm Springs Indians a fishing campsite of approximately 7.4 acres lying adjacent to the fishing sites at Celilo.

45 STAT. 1150

In 1947 the Federal Government appropriated funds for the purchase of 34.5 acres of land at Celilo for the use of the Indians entitled to enjoy fishing rights at their old and accustomed fishing sites at and in the vicinity of Celilo Falls, with express mention in that act of the Confederated Tribes of the Warm Springs Reservation of Oregon.

61 STAT. 466

The State of Oregon has by statute recognized the right of the Warm Springs Indians to take fish under their initial treaty of June 25, 1855.

OREGON LAWS 1949, CHAPTER 346

In the experience of the Warm Springs Indians since 1865 the only effort which has been made to challenge the treaty rights of the Warm Spring Indians in the Celilo fishery has been the recent claim of the Yakima Indians to complete ownership of the Celilo fishery. It is difficult to believe that the Yakima Indians would claim to be entitled to a value of the fishery computed and determined upon the basis of fish caught by Warm Springs Indians and Umatilla Indians. The greatest sum to which they could in any event be entitled would be a valuation based upon the fish actually caught by members of the Yakima tribe. Until stringent action by the State of Washington against out-of-season Indian fishing in that State in recent years, the Yakima Indians did not come from the State of Washington to the Celilo fisheries in Oregon in any great numbers. In recent years the Yakima Indians have been aggressive in their encroachment upon the fishing stations of the Warm Springs Indians and Umatilla Indians at Celilo.

REQUEST OF THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

The people of the Confederated Tribes of the Warm Springs Reservation of Oregon appreciate the hearing given the tribal delegates and the consideration given this prepared statement. The people of the Confederated Tribes of the Warm Springs Reservation of Oregon in general council May 2, 1953, indicated their approval of the contract and their willingness to proceed with final ratification of the agreement of March 10, 1953. Through their delegates, they respectfully ask favorable consideration of appropriations for the Dalles Dam project sufficient to permit the initial payment before December 31, 1953, of $200,000 to the Confederated Tribes of the Warm Springs Reservation of Oregon.

THE CONFEDERATED TRIBES OF THE
WARM SPRINGS RESERVATION OF OREGON,
CHARLES JACKSON, *Delegate.*
FRANK SUPPAH, *Delegate.*
T. LELAND BROWN,
The Dalles, Oreg.
FRANK E. NASH,
926 American Bank Building, Portland 5, Oreg.
Attorneys for the Confederated Tribes of the Warm Springs Reservation of Oregon.

EXHIBIT A–1

ECONOMIC TABLE 1.—*Indian fish catch at Celilo Falls and vicinity of salmonidae and miscellaneous species at known and estimated poundages*

SPRING CHINOOK

Year	Commercial sales	Sold to tourists	Subsistence catch		
			Open season	Closed season	Total
1947	[1] 205,265	[5] 6,449	[5] 7,923	[5] 6,681	14,604
1948	[1] 626,922	[5] 6,449	[5] 7,923	[5] 6,681	14,604
1949	[1] 213,047	[5] 6,449	[5] 7,923	[5] 6,681	14,604
1950	[1] 230,122	[5] 6,449	[5] 7,923	[5] 6,681	14,604
1951	[2] 670,908	[4] 6,449	[4] 7,923	[4] 6,681	[4] 14,604
5-year total	1,946,264	32,245	39,615	33,405	73,020
5-year average annual	389,253	6,449	7,923	6,681	14,604

SPRING JACKS

1947	(1)	[5] 285	[5] 437	[5] 392	829
1948		[5] 285	[5] 437	[5] 392	829
1949		[5] 285	[5] 437	[5] 392	829
1950		[5] 285	[5] 437	[5] 392	829
1951		[4] 285	[4] 437	[4] 392	829
5-year total		1,425	2,185	1,960	4,145
5-year average annual		285	437	392	829

FALL CHINOOK

1947	[1] 1,915,287	[6] 60,000	[5] 6,760	[7] 412,740	419,500
1948	[1] 1,973,035	[6] 62,000	[5] 6,760	[7] 291,060	297,820
1949	[1] 798,431	[6] 20,000	[5] 6,760	[7] 422,900	429,660
1950	[1] 1,286,640	[6] 40,000	[5] 6,760	[7] 381,240	388,000
1951	[10] 661,126	[4] 55,501	[4] 6,760	[4] 386,965	393,725
5-year total	6,634,519	237,501	33,800	1,894,905	1,928,705
5-year average annual	1,326,904	47,500	6,760	378,981	385,741

See footnotes at end of table, p. 1315.

EXHIBIT A–1—Continued

ECONOMIC TABLE 1.—*Indian fish catch at Celilo Falls and vicinity of salmonidae and miscellaneous species at known and estimated poundages*—Continued

FALL JACKS

Year	Commercial sales	Sold to tourists	Subsistence catch		
			Open season	Closed season	Total
1947	(1)	[5] 4,908	[5] 1,045	[7] 3,552	4,597
1948		[5] 4,908	[5] 1,045	[7] 10,096	11,141
1949		[5] 4,908	[5] 1,045	[7] 8,584	9,629
1950		[5] 4,908	[5] 1,045	[7] 9,392	10,437
1951		[4] 4,908	[4] 1,045	[4] 19,656	20,701
5-year total		24,540	5,225	51,280	56,505
5-year average annual		4,908	1,045	10,256	11,301

BLUEBACK

1947	[1] 119,624	[5] 1,022	[5] 144	[5] 7,522	7,666
1948	[1] 51,605	[5] 1,022	[5] 144	[5] 7,522	7,666
1949	[1] 12,579	[5] 1,022	[5] 144	[6] 7,800	7,944
1950	[1] 45,394	[5] 1,022	[5] 144	[6] 400	544
1951	[10] 24,812	[4] 1,022	[4] 144	[4] 14,365	14,509
5-year total	254,014	5,110	720	37,609	38,329
5-year average annual	50,802	1,022	144	7,522	7,666

STEELHEAD

1947	[1] 245,575	[6] 9,000	[3] 3,806	[6] 45,000	48,806
1948	[1] 188,295	[6] 5,400	[3] 3,806	[6] 71,100	74,906
1949	[1] 211,590	[6] 5,400	[3] 3,806	[6] 60,100	63,906
1950	[1] 156,099	[6] 6,300	[3] 3,806	[6] 62,100	65,906
1951	[10] 372,145	[4] 31,491	[4] 3,806	[4] 168,200	172,006
5-year total	1,173,704	57,591	19,030	406,500	425,530
5-year average annual	234,741	11,518	3,806	81,300	85,106

SILVERS

1947	[1] 12,712	[6] 800	[5] 74	[6] 9,600	9,674
1948	[1] 680	[6] 0	[5] 74	[6] 800	874
1949	[1] 731	[6] 0	[5] 74	[6] 800	874
1950	[1] 6,575	[6] 400	[5] 74	[6] 30,400	30,474
1951	[10] 32,188	[4] 498	[4] 74	[4] 5,261	5,335
5-year total	52,886	1,698	370	46,861	47,231
5-year average annual	10,577	340	74	9,372	9,446

MISCELLANEOUS

Year	Commercial sales		Subsistence catch, lampreys	Total
	White sturgeon	Shad		
1947	[1] 48,966	[1] 5,981	[9] 10,000	64,947
1948	[1] 60,025	[1] 782	[9] 10,000	70,807
1949	[1] 24,693	[1] 6,911	[9] 10,000	41,604
1950	[1] 19,364	[1] 1,375	[9] 10,000	30,739
1951	[2] 30,691	[2] 3,575	[9] 10,000	44,266
5-year total	183,739	18,624	50,000	252,363
5-year average annual	36,748	3,725	10,000	50,473

See footnotes at end of table, p. 1315.

EXHIBIT A–1—Continued

ECONOMIC TABLE 1.—*Indian fish catch at Celilo Falls and vicinity of salmonidae and miscellaneous species at known and estimated poundages*—Continued

TOTALS

Year	Commercial sales	Sold to tourists	Subsistence catch	Grand total
1947	2,553,410	82,464	515,676	3,151,550
1948	2,901,344	80,064	417,840	3,399,248
1949	1,267,982	38,064	537,446	1,843,492
1950	1,745,569	59,364	520,794	2,325,727
1951	1,795,445	100,154	631,709	2,527,308
5-year total	10,263,750	360,110	2,623,465	13,247,325
5-year average annual	2,052,750	72,022	524,693	2,649,465

BASIS FOR COMPUTATION OF POUNDAGE

[1] Based on Oregon Fish Commission records of commercial sales in Oregon and Washington upon which poundage tax was paid and as shown in table 8 of Publication No. 17 for 1947 to 1950, inclusive, which includes the poundage for all jacks sold commercially.

[2] Based on Oregon Fish Commission records, revised August 1, 1952, of commercial sales in Oregon and Washington upon which poundage tax was paid for the year 1951, including poundage for jacks.

[3] Based on Oregon Fish Commission records, revised August 1, 1952, of commercial sales in Oregon, only, upon which poundage tax was paid for the year 1951 and Army engineers' estimate of State of Washington poundage for the year 1951, computed from the average of the previous 4-year record (1947 to 1950, inclusive).

[4] Based on U. S. Fish and Wildlife 1951 census as revised July 8, 1952.

[5] Based on 1-year record (1951) U. S. Fish and Wildlife census, revised July 8, 1952, assuming previous years to be equivalent.

[6] Based on Oregon Fish Commission record as shown in table 6 of Publication No. 17.

[7] Based on numbers of fish as shown on tables 10 to 13, inclusive, of Oregon Fish Commission Publication No. 17 applying 20 pounds each for chinook and 4 pounds each for jacks.

[8] Based on 2 years (1949 and 1950) record of Oregon Fish Commission, table 6, Publication No. 17 and 1 year (1951) census by U. S. Fish and Wildlife Service, combined to derive an average which is assumed to apply to the previous unknown years of 1947 and 1948.

[9] Based on U. S. Fish and Wildlife estimate.

[10] Based on Oregon Fish Commission record of total commercial sales (revised August 1, 1952) adjusted as to species as determined by U. S. Fish and Wildlife revised table July 8, 1952. Jacks included.

Open season.—All computed on same basis as notes 4 and 5 under tourist sales.

Closed season.—Partially computed on same basis as notes 4 and 5 under tourist sales. Partially computed on same basis as note 6 under tourist sales.

EXHIBIT A–2

ECONOMIC TABLE 2.—*Tabulation of poundages, prices, and estimated values for 5-year period (1947 to 1951, inclusive)*

COMMERCIAL SALES

Year	Spring chinook			Spring jacks			Fall chinook			Fall jacks			Blueback		
	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value
1947	205, 265	$0. 23	$47, 210				1, 915, 287	$0. 23	$440, 520				119, 624	$0. 26	$31, 100
1948	626, 922	. 26	163, 000				1, 973, 035	. 18	355, 150				51, 605	. 23	11, 870
1949	213, 047	. 20	42, 610				798, 431	. 16	127, 750				12, 579	. 20	2, 520
1950	230, 122	. 24	55, 230				1, 286, 640	. 26	334, 530				45, 394	. 24	10, 890
1951	670, 908	. 36	241, 530				661, 126	. 20	132, 230				24, 812	. 36	4, 930
Total	1, 946, 264		549, 580				6, 634. 519		1, 390, 180				254, 014		61, 310

Year	Steelhead			Silvers			White sturgeon			Shad			Total pounds	Total value
	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value		
1947	245, 575	$0. 19	$46, 660	12, 712	$0. 23	$2, 920	48, 966	$0. 37	$18, 120	5, 981	$0. 20	$1, 200		
1948	188, 295	. 185	34, 830	680	. 18	120	60, 025	. 37	22, 210	782	. 17	130		
1949	211, 590	. 145	30, 680	731	. 16	120	24, 693	. 20	4, 940	6, 911	. 10	690		
1950	156, 099	. 21	32, 780	6, 575	. 26	1, 710	19, 364	. 20	3, 870	1, 375	. 10	140		
1951	372, 145	. 185	68, 850	32, 188	. 20	6, 440	30, 691	. 25	7, 670	3, 575	. 12	430		
Total	1, 173, 704		213, 800	52, 886		11, 310	183, 739		56, 810	18, 624		2, 590	10, 263, 750	$2, 285, 580

SOLD TO TOURISTS

Year	Spring chinook			Spring jacks			Fall chinook			Fall jacks			Blueback		
	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value
1947	6,449	$0.32	$1,600	285	$0.30	$90	60,000	$0.33	$19,800	4,908	$0.30	$1,250	1,022	$0.35	$330
1948	6,449	.35	1,850	285	.30	90	62,000	.28	17,360	4,908	.30	1,250	1,022	.32	300
1949	6,449	.30	1,580	285	.26	70	20,000	.26	5,200	4,908	.26	1,080	1,022	.30	290
1950	6,449	.33	1,740	285	.33	90	40,000	.36	14,400	4,908	.33	1,380	1,022	.33	320
1951	6,449	.45	2,900	285	.30	90	55,501	.30	16,650	4,908	.30	1,470	1,022	.45	460
Total	32,245		9,760	1,425		430	237,501		73,410	24,540		6,430	5,110		1,700

Year	Steelhead			Silvers			White sturgeon			Shad			Total pounds	Total value
	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value		
1947	9,000	$0.30	$2,700	800	$0.33	$260								
1948	5,400	.30	1,620	0	.28	0								
1949	5,400	.26	1,400	0	.26	0								
1950	6,300	.33	2,080	400	.36	140								
1951	31,491	.30	9,450	498	.30	150								
Total	57,591		17,250	1,698		550							360,110	$109,530

EXHIBIT A–2—Continued

ECONOMIC TABLE 2.—*Tabulation of poundages, prices, and estimated values for 5-year period (1947 to 1951, inclusive)*—Continued

SUBSISTENCE CATCH

Year	Spring chinook			Spring jacks			Fall chinook			Fall jacks			Blueback		
	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value
1947	14,604	$0.47	$6,800	829	$0.39	$320	419,500	$0.47	$196,690	4,597	$0.39	$1,730	7,666	$0.47	$3,590
1948	14,604	.47	6,800	829	.40	330	297,820	.36	106,850	11,141	.40	4,390	7,666	.45	3,430
1949	14,604	.43	6,220	829	.34	280	429,660	.39	154,310	9,629	.34	3,220	7,944	.39	3,080
1950	14,604	.44	6,360	829	.40	330	388,000	.51	197,360	10,437	.40	4,110	544	.43	229
1951	14,604	.60	8,760	829	.43	360	393,725	.43	168,300	20,701	.43	8,900	14,509	.62	9,000
Total	73,020		34,940	4,145		1,620	1,928,705		823,510	56,505		22,350	38,329		19,320

Year	Steelhead			Silvers			Lampreys			Shad			Total pounds	Total value
	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value	Pounds	Price per pound	Value		
1947	48,806	$0.39	$18,790	9,674	$0.43	$4,160	10,000	$0.10	$1,000					
1948	74,906	.40	29,720	874	.39	340	10,000	.10	1,000					
1949	63,906	.34	21,520	874	.35	300	10,000	.10	1,000					
1950	65,906	.40	26,120	30,474	.40	12,190	10,000	.10	1,000					
1951	172,006	.43	73,960	5,335	.40	2,130	10,000	.10	1,000					
Total	425,530		170,110	47,231		19,120	50,000		5,000				2,623,465	$1,095,970
Grand total													13,247,325	3,491,080

EXHIBIT A–3

ECONOMIC TABLE 3.—*Summary tabulation—Estimated values of Indian fish catch showing 5-year total value (1947 to 1951, inclusive) and 5-year average annual values*

Species	Commercial sales		Sold to tourists		Subsistence catch		Total catch	
	5-year total	Average annual	5-year total	Average annual	5-year total	Average annual	5-year total	Average annual
Spring chinook	$549,580	$109,920	$9,760	$1,950	$34,940	$6,990	$594,280	$118,860
Spring jacks [1]			430	90	1,620	320	2,050	410
Fall chinook	1,390,180	278,040	73,410	14,680	823,510	164,700	2,287,100	457,420
Fall jacks [1]			6,430	1,290	22,350	4,470	28,780	5,760
Blueback	61,310	12,260	1,700	340	19,320	3,860	92,330	16,460
Steelhead	213,800	42,760	17,250	3,450	170,110	34,020	401,160	80,230
Silvers	11,310	2,260	550	110	19,120	3,820	30,980	6,190
White sturgeon	56,810	11,360					56,810	11,360
Shad	2,590	520					2,590	520
Lamprey eels					5,000	1,000	5,000	1,000
Total	2,285,580	457,120	109,530	21,910	1,095,970	219,180	3,491,080	698,210

[1] The values for all jack salmon sold commercially are included in the values of other species under commercial sales.

EXHIBIT B.—AGREEMENT EXECUTED BY THE UNITED STATES OF AMERICA DEPARTMENT OF DEFENSE ACTING BY AND THROUGH THE CORPS OF ENGINEERS, UNITED STATES ARMY AND THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

This agreement made and entered into this 10th day of March 1953, by and between the United States of America (hereinafter called "the Government"), Department of Defense, acting by and through the Corps of Engineers, United States Army, represented by the contracting officer executing this agreement, and the Confederated Tribes of the Warm Springs Reservation of Oregon, Warm Springs, Oreg., a Federal corporation existing by virtue of the act of June 18, 1934, chartered March 31, 1938 (hereinafter called "the Confederated Tribes"), acting by and through their Tribal Council, represented by the chairman of the Tribal Council executing this agreement.

Witnesseth:

Whereas, under and by virtue of the Flood Control Act of 1950, title II, Public Law No. 516, 81st Congress, 2d session, approved May 17, 1950, the Corps of Engineers, Department of the Army, has been authorized to construct the Dalles Dam, Columbia River, Wash. and Oreg. (hereinafter called the project); and

Whereas the Confederated Tribes have been taking fish since time immemorial at the usual and accustomed fishing stations located within and adjacent to the project, particularly in the vicinity of Celilo Falls, Columbia River, and since the ceding of their lands along the Columbia River to the United States the Confederated Tribes have been and now are taking fish at those usual and accustomed stations; and

Whereas said usual and accustomed fishing stations will be destroyed and inundated by construction of the project, and

Whereas it is the intent of the Government to compensate the Confederated Tribes for the destruction and inundation of those usual and accustomed stations by the construction, operation, and maintenance of the project, and to avoid litigation; and the amounts set forth herein are considered just compensation for such destruction or inundation.

Now, therefore, for and in consideration of the premises and mutual benefits and advantages accruing hereunder to each of the parties, it is mutually agreed by and between the parties hereto as follows:

1. EXHIBITS

The following exhibits are attached hereto and by this reference hereby form a part of this agreement:

Exhibit A: Drawing, file number DDG–B–O–0/1, dated September 25, 1952, revised November 24, 1952, entitled "The Dalles Dam, Columbia River, Wash-

ington and Oregon, Reservoir Flowage Area Affecting Indian Fisheries," showing the area containing affected fishing stations of the Confederated Tribes.

Exhibit B: Form of resolution of the Tribal Council, authorizing execution of this agreement.

2. PAYMENT

(*a*) The Government will pay the total sum of $4,047,800 to the Confederated Tribes as full consideration for the destruction or inundation of those usual and accustomed fishing stations within the area shown by shading upon exhibit A hereof and for the release and subordination hereinafter set forth in paragraph 5.

(*b*) The construction operations of the Government have permanently encroached upon a portion of those usual and accustomed fishing stations in the vicinity of and at the dam site of the project. To compensate the Confederated Tribes for such encroachment, the Government will pay the Confederated Tribes on or before December 31, 1953, the initial sum of $200,000, in accordance with paragraph 2 (*d*) hereof and as part payment of the consideration required by paragraph 2 (*a*) hereof, and the Confederated Tribes do hereby subordinate the right to use those usual and accustomed fishing stations within the construction areas of the project to the right of the Government to construct, maintain, and operate the project.

(*c*) The balance of the sum set forth in paragraph 2 (*a*) hereof will be paid in one lump sum on or before final closure of the dam or inundation of the fishing stations set forth in exhibit A hereof, whichever occurs first.

(*d*) Payment shall be made by depositing the amounts, set forth in paragraphs 2 (*b*) and 2 (*c*), hereof, in the United States Treasury for the account of the Confederated Tribes, unless the Congress shall direct a different manner of payment, in which event payment shall be made in accordance therewith.

(*e*) No payment will be made under this agreement for the real or personal property of individual members of the Confederated Tribes or for removal of cemeteries or burial grounds. It is recognized, however, that the cost of construction of temporary fishing platforms at the Indian fisheries is an item of fishing expense incurred by the individual members of the Confederated Tribes, but since the cost of said temporary fishing platforms has been considered and evaluated in arriving at the tribal value set forth in paragraph 2 (*a*) above, it is agreed that no separate or additional payment will be made by the Government to the individual members of the Confederated Tribes for the cost of constructing or removing temporary fishing platforms as distinct from any compensable interest which individual members of the Confederated Tribes may be able to establish in permanent cableways and appurtenances.

(*f*) All of the obligations of the Government under this agreement shall be subject to action by the Congress either authorizing payment to the Confederated Tribes for destruction of the fishing stations covered by this agreement or an act appropriating project funds for this purpose as shown by the language of such act or acts or the entire legislative history thereof.

3. PRECLOSURE FISHING

(*a*) Upon 30 days' posted notice of a determination by the contracting officer or his duly authorized representative that the use of any fishing station or stations herein involved will interfere with the construction, operation, or maintenance of the project, the Confederated Tribes and individual members thereof will promptly vacate and cease to ultilize said station or stations. In the absence of such determination, the Confederated Tribes and individual members thereof may continue to use such station or stations subject only to such regulations as may be promulgated by the contracting officer to avoid interference with the construction, operation, or maintenance of the project.

(*b*) It is presently planned to start construction of the final closure fill of the dam in October 1956, and by April 1957, to raise the reservoir pool to elevation 155 mean sea level, U. S. C. and G. datum, and shortly thereafter to elevation 160 mean sea level, U. S. C. and G. datum. However, these dates and elevations are tentative and are subject to change depending on the progress of construction. If circumstances require it, the contracting officer will from time to time revise the above dates and will advise the Confederated Tribes of the revisions. The contracting officer will give notice at least 6 months in advance by registered mail to the chairman of the Tribal Council, mailed in care of the Superintendent of the Warm Springs Indian Agency, Warm Springs, Oreg., which shall be construed as notice to the Confederated Tribes and individual members thereof of the date on or after which final closure of the dam will be made.

4. SHARING OF OTHER BENEFITS

In the event that the contracting officer in connection with the construction, operation, and maintenance of the project, subsequent hereto provides noncash benefits of any kind whatsoever to any other Indian tribe, group or band, he shall likewise, in addition to payments provided in paragraph 2 hereof, provide the Confederated Tribes with similar and equal noncash benefits, or with the right to share such noncash benefits on a like or uniform basis with such other tribe, group or band. In the event that the contracting officer agrees through negotiations to provide noncash benefits to any other Indian tribe, group, or band as part consideration, and in lieu of, their proportionate share of the total value of the fishery thus reducing their per capita share of the settlement it is agreed that the Confederated Tribes will not share in the use of the noncash benefits thus provided without a corresponding reduction in the payments provided in paragraph 2 hereof.

5. RELEASE AND SUBORDINATION

The Confederated Tribes, for and in consideration of performances by the Government of the obligations and terms hereof to be kept, observed and performed by the Government, by these presents for themselves and their agents, assigns or successors and for their people and their descendants forever, do hereby subordinate the rights of the Confederated Tribes to take fish at those usual and accustomed stations within the area as shown shaded on exhibit A hereof, to the right of the Government to construct, maintain, and operate the project and do hereby release and forever discharge the Government, its officers and agents, of and from all manner of action and causes of action, suits and causes of suits, debts, damages, charges, expense, claims and demands whatsoever, which the said Confederated Tribes or their agents, assigns or succesors or their people or their descendants may now or hereafter have by reason of or resulting from the construction, operation, and maintenance of the project, excepting only the rights of individual Indians to compensation for damages to tangible property individually owned other than temporary fishing platforms. The Confederated Tribes on behalf of themselves and their agents, assigns, or successors and for their people and their descendants forever, do hereby further release the Government, its officers and agents, of and from all further manner of action and causes of action, suits and causes of suit, debts, damages, charges, expense, claims and demands whatsoever, arising on account of injury to or adverse affect on those usual and accustomed stations within the area as shown shaded on exhibit A.

6. INTEREST OF MEMBER OF CONGRESS

No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this agreement or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

7. TERMINATION

(*a*) In the event that Congress does not appropriate funds in fulfillment of the Government's obligation under paragraph 2 (*b*) above or in the event that the Congress directs some other method of settlement with the Confederated Tribes, either party to this agreement may elect without prejudice to terminate the agreement on written notice, and in the further event that payment under said paragraph 2 (*b*) is not made by December 31, 1953, the Confederated Tribes may elect to declare this agreement terminated and may pursue any and all remedies afforded them by the Constitution, statutes, or laws of the United States for any and all damages that have occurred or any additional damages that may have been caused them by the construction or partial construction of the project.

(*b*) In the event that Congress does not appropriate additional funds to meet the obligations of the Government under this agreement prior to final closure of the dam or in the event that the Congress does not appropriate funds to continue the project for a period of 5 years from the latest appropriation for project purposes, then the Confederated Tribes may elect to declare this agreement terminated except as to the subordination of the rights of Confederated Tribes set forth in paragraph 2 (*b*) hereof, may retain the $200,000 paid them under paragraph 2 (*b*) hereof, and may pursue any and all remedies afforded them by the Constitution, statutes, or laws of the United States for any additional damage that may have been caused by the construction or partial construction of the project.

(c) In the event this agreement is terminated under any termination provision contained hereinabove, this agreement or any provision thereof, shall not be considered or used against any interest or right, present or future, of either party hereto, and, provided further, that said agreement shall be considered as being without prejudice to either party hereto regardless of the nature of any action which may be undertaken subsequent to termination hereof.

8. LEGAL FEES

No moneys appropriated for payments under this agreement shall be used to pay for legal fees, except in accordance with the terms of attorney contracts made, with the approval of the Secretary of the Interior or his duly authorized representative, by the Confederated Tribes; unless the Congress shall direct a different manner of determining the attorneys' fees, in which event the money appropriated may be used in accordance therewith.

9. EQUALIZATION OF PAYMENTS

Inasmuch as the payments to be made under this agreement have, in general, been predicated upon a division of the total value of the Celilo fishery distributed to the tribes concerned on a per capita basis, the amount of compensation required in paragraph 2 (a) hereof to be paid to the Confederated Tribes is based on a population of 1,078 members and would permit payment of $3,754.91 to each member. In the event that the Government shall agree, through negotiation, to subsequently pay the Yakima Tribes an amount which, if distributed on a per capita basis to their present 3,637 members, would permit larger per capita payments to each member, it is agreed that the Government will in the manner provided in paragraph 2 (d) hereof pay to the Confederated Tribes, in addition to the payment provided in paragraph 2 (a) hereof, such additional amounts as would permit them to realize the same per capita payments as that agreed to with the Yakima Tribes.

10. RESTRICTIVE FISHING

It is mutually recognized that fishing in the immediate vicinity of the dam, powerhouse, locks, fishways, as determined by the contracting officer, will interfere with the construction, operation, or maintenance of the project and will not be permitted after final closure and inundation.

11. CLAIM PENDING BEFORE INDIAN CLAIMS COMMISSION

After receipt of the sum herein provided in paragraph 2 (a), the Confederated Tribes agree that they will seek no recovery beyond nominal damages by reason of their second claim in the petition now pending before the Indian Claims Commission, Docket No. 198.

12. USE AS EVIDENCE

It is agreed that neither the consideration provided for by this agreement, nor the agreement itself (or any part thereof) shall be offered in evidence or referred to by the plaintiff in any suit now pending or hereafter filed by any Indian tribe, band, or group against the United States excepting only a suit to enforce any obligation under this agreement.

13. DEFINITIONS

Except for the original signing of this agreement and except as otherwise stated herein, the term "contracting officer" as used herein shall include his duly appointed successor or his duly authorized representative.

14. APPROVALS

This agreement shall be subject to the approval of the Chief of Engineers, Department of the Army, the Commissioner of Indian Affairs, and the Secretary of Interior, Department of Interior, or their duly authorized representatives and a majority of the voting adult members of the Confederated Tribes voting at a referendum election called for the purpose, provided at least one-third of the eligible voters actually vote, and shall not be binding until so approved.

It is understood and agreed by the parties hereto that this agreement will be executed in triplicate with 1 copy for the Confederated Tribes and 2 for the Government.

In witness whereof, the parties hereto have executed this agreement at Warm Springs, Oreg., by their respective representatives and officers thereunto duly authorized, as of the day and year first above written.

THE UNITED STATES OF AMERICA,
By T. H. LIPSCOMB,
Colonel, Corps of Engineers,
Contracting Officer.

Witnesses:
THOMAS J. BALLEN.
PERCY M. OTHUS.
FRED E. ABRAHAM.

THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON, ACTING BY AND THROUGH THEIR TRIBAL COUNCIL,
By AVEX D. MILLER, *Chairman.*

Witnesses:
CHARLES JACKSON.
SAM WEWA.
FRANK SUPPAH.

Approved by tribal council:
T. LELAND BROWN.
FRANK E. NASH.
SAM VAN VACTOR.

I, Vernon Jackson, certify that I am the secretary of the tribal council of the Confederated Tribes named as a party to this agreement, and that Avex D. Miller, who signed this agreement on behalf of said tribes, is the chairman of the tribal council and that said agreement was duly signed on behalf of said tribes, by virtue of a resolution approved by a majority vote of the tribal council at a regular meeting authorizing the execution of this agreement.

In witness whereof, I hereunto affix my hand and tribal corporate seal, this 11th day of March 1953.

VERNON JACKSON, *Secretary.*

RESOLUTION AUTHORIZING COMPENSATION AGREEMENT WITH UNITED STATES OF AMERICA

Be it resolved by the Tribal Council of the Confederated Tribes of the Warm Springs Reservation of Oregon, That pursuant to authority granted the tribal council by article V of the tribal constitution, the tribal council does hereby approve that certain agreement with the United States of America, Department of Defense, acting by and through the Corps of Engineers, United States Army, for compensation for the subordination of tribal fishing rights and the destruction and inundation of usual and accustomed fishing stations by the construction, operation, and maintenance of the Dalles Dam, said agreement being in the form as attached hereto and by reference made a part hereof; and the chairman of the tribal council, for and on behalf of the tribal council and the Confederated Tribes of the Warm Springs Reservation of Oregon, be and he hereby is authorized and instructed to execute said agreement forthwith by subscribing his name to as many original counterparts as may be necessary or desirable: *Provided, however,* That this is a matter of great importance and, pursuant to article VI of the tribal constitution, this resolution shall be submitted to the vote of the people for approval and the agreement so executed as herein provided shall not be binding until approved as required by paragraph 14 of said agreement.

CERTIFICATION

The undersigned, as secretary-treasurer of the Confederated Tribes of the Warm Springs Reservation of Oregon, hereby certifies that the tribal council is composed of 11 members of whom 9, constituting a quorum, were present at a meeting thereof duly and regularly called, noticed, convened, and held on March 11, 1953, and the foregoing resolution was adopted by the affirmative vote

of 8 members, the chairman not voting; that said resolution has not been rescinded or amended in any way.

VERNON JACKSON,
Secretary-Treasurer.

Approved: March 11, 1953.

NICHOLAS WELTER,
Superintendent.

[House of Representatives, 50th Cong., 1st sess., EX. Doc. No. 183]

INDIAN FISHING PRIVILEGES

Letter from the Secretary of the Treasury, transmitting an estimate from the Secretary of the Interior of appropriation for the purchase of land near The Dalles of the Columbia River, Oreg., for the use of the Indians on the Warm Springs Reservation

FEBRUARY 28, 1888.—Referred to the Committee on Indian Affairs and ordered to be printed

TREASURY DEPARTMENT,
February 27, 1888.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of a letter from the Secretary of the Interior of the 24th instant, submitting an estimate for an appropriation of $3,000 for the purchase of land in the vicinity of The Dalles of the Columbia River, in the State of Oregon, for the use and benefit of the Indians on the Warm Springs Reservation.

Respectfully yours,

HUGH S. THOMPSON,
Acting Secretary.

DEPARTMENT OF THE INTERIOR,
Washington, February 24, 1888.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SIR: In accordance with the provisions of section 2 of the act of July 7, 1884 (23 Stat. 254), I have the honor to transmit herewith for presentation to Congress, copy of a letter of February 20, 1888, from the Commissioner of Indian Affairs, enclosing with accompanying papers an item of appropriation in the sum of $3,000, the same, or as much thereof as may be required to be used in the purchase, under the direction of the Secretary of the Interior, of a tract of land at or in the vicinity of The Dalles of the Columbia River in the State of Oregon, to be held by the United States in trust for the use and benefit of the Indians on the Warm Springs Reservation, to enable them to take and cure fish from said river.

The report of the Commissioner of Indian Affairs gives a history of the proceedings under which these Indians have heretofore been deprived of their fishing privileges, and shows the urgent necessity that some provision should be made to give them access to the Columbia River to enable them to secure fish, which is the most important item of their food supply.

For further information on the subject I enclose herewith an extract from the last annual report of my predecessor in this Department in relation to Indian fishing privileges, wherein the special case now under consideration is mentioned, and the necessity for some measure of relief urged.

The Commissioner refers to the valuable services rendered to the Government by the Warm Springs Indians, notably against the Piutes and Modocs, and that certain promises of pensions, etc., made to them have never been fulfilled. He further states that the plan now proposed for their relief in the matter of the fisheries is based upon the report of a special agent of his office sent to the locality to examine into the matter, and he strongly urges that the appropriation requested be granted, so that the plan may be carried out.

The recommendation of the Commissioner has my concurrence, and the matter is recommended to Congress for favorable and early consideration and action thereon.

Very respectfully,

WM. F. VILAS, *Secretary.*

DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
Washington, February 20, 1888.

The SECRETARY OF THE TREASURY.

SIR: I have the honor to invite your attention to the case of the Warm Springs Indians with reference to the salmon-fishing privileges which they formerly enjoyed at or near The Dalles of the Columbia in Oregon.

This case has for a long time been a matter of deep concern, not only to this office, but to the several agents who have had charge of these Indians, the military officers in that department, and the many friends of the Indians cognizant of its history.

In their treaty with the Government, concluded June 25, 1855 (12 Stat. 963), whereby they ceded to the United States the country bordering on the Columbia River, from the Cascade Falls to the mouth of Willow Creek, and extending many miles south, they reserved the right of taking fish in common with the whites, at all usual and accustomed places, and of erecting suitable houses for curing the same.

By a supplemental treaty, concluded November 15, 1865 (14 Stat. 751), they appear to have relinquished the rights reserved by the former treaty in respect of these fisheries.

One of the usual and accustomed places to which reference was intended in the treaty of 1855 was the south shore along and near The Dalles of the Columbia. Indeed the fisheries there were most resorted to by the Indians at the date of said treaty, and for untold generations almost their entire food supply has been obtained there.

The indians have always solemly protested that they did not agree to relinquish their rights in the fisheries as the supplemental treaty declares, and that they were grossly deceived and defrauded by the representative of the Government who negotiated said treaty with them. They declare that the only thing that was asked of them was that they should remain on their reservation and not go beyond its boundaries without a written pass from their agent, to which proposal they agreed. The subject of the fisheries was never so much as mentioned to them, they say.

Their story has many believers among the older white residents of the neighborhood, and it has been often repeated both in official and unofficial communications to this office.

I believe that every official who ever examined into the matter became fully convinced of the truthfulness of the story as related by the Indians.

To my mind it is hardly credible that the Indians would have relinquished so valuable a franchise for the mere pittance named in the treaty, $3,500, to be expended "in the purchase of teams, agricultural implements, seeds, and other articles calculated to advance said Confederated tribes in agriculture and civilization." As the population of the Confederated Tribes at that time was 1,070, this munificent sum would equal to about $3.50 per capita, with which to make the promised purchases and "to advance said confederated tribes in agriculture and civilization." I might add that it has been represented that the agent of the Government who negotiated this treaty "borrowed" the cattle and wagons purchased with the compensation money, and failed to return or otherwise account for the same.

When it is known that these Indians and their ancestors for a hundred years or more had found in this abundant natural food supply a sure escape from hunger, when all other resources were inadequate, or perhaps entirely cut off, it is impossible to conceive how they could willingly have relinquished their privileges there for such a trifling consideration.

They were careful to reserve the right in the treaty of 1855—a most natural thing to do, living, as they had been, free from care in the knowledge that each year would bring them a supply of food sufficient to their natural wants.

It is not necessary to say that our Indians have never been easily persuaded to abandon or relinquish their fishing and hunting grounds. Our treaties with them are replete with evidence showing with what tenacity they have held on to them. A case might be cited of a tribe of Indians who retained for themselves by express treaty stipulations, incorporated in 3 separate treaties made at intervals of 16 and 20 years, respectively, the right of taking fish at one of their accustomed places, although they had ceded the territory for hundreds of miles around. Hence I say I think it highly improbable that the Warm Springs Indians would have relinquished their rights in these valuable fisheries for the mere asking, and upon such terms as I have stated.

All the lands along the river bank have passed out of the control of the United States to individual settlers, and the Indians are not allowed to pass from the public highway to the river to fish. Barbed-wire fences securely locked or guarded effectually bar their access to the river.

This condition of affairs has been maintained for some 4 or 5 years, and with each returning season the Indians have made effort to get a foothold at the fisheries. Two years ago they tore down the fences and forced a passage to the river. A public meeting was then held in Dalles City, which resulted in securing to the Indians temporary access to the fisheries at a given point, but they were soon driven off again.

Judge T. S. Lang, a citizen of The Dalles, and a warm friend of the Indians, wrote, under date of June 14, 1887, at the suggestion of many citizens of that place as follows:

"Until within 4 years there has been ample privileges for whites and Indians to fish in accordance with the word and spirit of the Palmer treaty of 1855. But since the introduction of the refrigerating cars upon the railroad which runs along the Columbia River and in close contiguity to the fisheries, white men have bought from the State and from the United States all the lands in Oregon which adjoin the old accustomed fishing places, and have fenced it up, and placed sentries to prohibit an Indian or white man from getting or catching a salmon upon the "accustomed" ground for all time. * * * They are not now allowed to catch fish for their own winter supply. * * * I wish, dear sir, you could see the Indians as they sit about the rocks adjoining the fisheries, and see tons of them going into refrigerating cars, caught by wheels lowered into the eddies in which this beautiful fish rest in their way up through the rapids. These wheels are 30 feet in diameter, with 5 or 6 buckets, which take in a good day's run 10 or 20 tons. These Indians come constantly to me and beg of me to write to you for them."

Gen. John Gibbon, United States Army, commanding the Department of the Columbia, personally investigated the complaints of these Indians only a few months ago, and wrote to Army headquarters under date August 22, 1887, as follows:

"These Indians all declare with one voice that at the first treaty (1855) there was great mourning amongst the Indians at the prospect of having to give up their salmon fisheries on the Columbia River, on which they were so dependent for food; that noticing this, General Palmer on being told the cause of it, said at once that there was no intention of depriving them of their rights to fish in the Columbia, and that the provisions in clause 1 of the treaty were therefor inserted. The Indians continued to enjoy their fishery rights thereafter. That in the treaty 10 years afterwards, 1865, nothing whatever was said to them regarding the giving up of their fishery rights, and that they were simply told the treaty was intended to regulate their manner of leaving the limits of the reservation with passes from the agent to prevent them from being taken for hostiles, the Snake Indians being at the time at war. These facts I was informed had also been sworn to by Donald McKay, the principal interpreter of the treaty, and they positively declare that in this treaty they were cheated out of their fishery rights. But these rights they continued to exercise for many years afterward and until recently, when the occupation of the lands adjacent to the river cut them off, and at present they are practically debarred from this very necessary source of subsistence."

General Gibbeon then gives expression to his own views, as follows:

"The indemnity given these Indians by article 5 of the treaty is ridiculously small ($3,500), and I am thoroughly convinced that the view given by the Indians on this fishery question is correct, But the rights to land bordering the river, and with them the fishery rights, have been transferred by the Government to its citizens, and these poor Indians are now deprived of what is at present an almost indispensable source of subsistence to them. This is especially so this year, for they have but few cattle, their crops this season have been very poor, and the agent informs me he fears there will be actual suffering among them this winter."

The agents of the Government and friends of the Indians have been at their wits ends to devise some means whereby the Indians might obtain access to the river, and occasionally temporary accommodations have been secured for them, but always of a most unsatisfactory character.

This office has assisted these efforts to the extent of its power, and recently a special agent was sent to The Dalles to make a thorough inspection of the premises, and if possible devise some practicable plan for securing to the Indians the permanent use of some portion of the fisheries.

Special Agent G. W. Gordon, to whom this work was entrusted, believes that the best way to do this is to purchase a tract of land bordering the fisheries and

hold the same for their exclusive use. He has found one owner who will sell 5½ acres of unencumbered land on the river for $1,000, and he thinks that an adjoining tract of about the same area can be bought, which together would be all that would be required, I invite your attention to his report, copy herewith. It is dated January 3, 1888.

I am very much gratified at the prospect of finding a satisfactory solution to this vexed question, and I heartily commend the plan proposed by the special agent. I do not see any other way out of the difficulty, and under all the circumstances I believe it to be the duty of the Government to adopt this one remaining plan for righting the great wrong which has been done these deserving people.

It should not be forgotten that the Warm Springs Indians have upon more than one occasion responded to the call of Government in times of peril, and rendered services of the greatest value.

"When the Piutes were murdering the defenseless settlers and keeping the soldiers at bay the Government called on the Warm Springs Indians for help, and it came. When the Modocs held the lava beds and there were graves of over 190 soldiers slain in the futile attempt to dislodge them from their stronghold the Government turned imploringly to the people here for help, promising them that if killed in battle or wounded they would be pensioned (which agreement was never complied with). Help came quickly, and the result is known everywhere, and yet when the people here or their agent ask for what they were promised and what they should have the Government is silent as the grave" (Agent Gessner, in annual report for 1885).

I have gone into the history of this case at some length in order to show the grave importance I attach to the proposition of Agent Gordon for the relief of these Indians, and I sincerely hope that Congress will appropriate the needed sum for that purpose and that the Department will unite with me in urging the matter upon the early attention of that body.

I think that the sum of $3,000 would probably be sufficient to purchase all the land needed—a very small sum for an object so important and highly beneficient in its purposes.

It is possible that any attempt to purchase a tract of land outright might meet with failure, and to provide against such a contingency I think it would be wise to procure authority for leasing a suitable fishing site for a term of years. The fishing season begins about the 1st of June, and should no satisfactory arrangement have been effected by that time it would be extremely unfortunate. Special Agent Gordon recommends this course in a letter just received.

I have prepared and herewith enclosed a draft of an item (in duplicate) for insertion in the Indian appropriation bill intended to meet the case, and have the honor to recommend that it be transmitted to Congress with your views thereon.

A copy of this report is inclosed, and also duplicate copies of a report made by Agent Wheeler under date of March 12, 1886, wherein the history of the negotiations which led to the supplemental treaty of 1865, as related by some of the Indians who signed the same, and one of the official interpreters, Donald McKay, is fully set out, to which latter I invite your careful attention.

Very respectfully, your obedient servant,

J. D. C. ATKINS, *Commissioner.*

The SECRETARY OF THE INTERIOR:

ITEM

To enable the Secretary of the Interior to purchase, upon such terms and conditions as he may deem just and proper, a tract of land at or in the vicinity of The Dalles of the Columbia River, in the State of Oregon, of sufficient area and in such locality as to afford suitable facilities for the Indians of the Warm Spring Reservation to take fish in said river, and to properly cure the same, said land to be held by the United States in trust for the use and benefit of said Indians, $3,000, or so much thereof as may be necessary, to be immediately available: *Provided*, That said Secretary may in his discretion lease a tract of land at the place and for the purposes indicated, for a term of years, in lieu of purchasing the same, at a cost not to exceed $600 per annum.

THE DALLES, OREG.,
January 3, 1888.

SIR: Referring to my letter, dated December 4, 1887, touching the matter of "The Dalles Fishery," I have the honor to state, that one of the Indians therein referred to, Paluse Charley by name, will sell his interest in the fishery for the sum of $1,000 with the condition that he and his family are allowed to remain at the fishery, and be allowed to take fish therefrom, in common with the other Indians, for his personal and family use, but not for commercial purposes. The amount of land he owns on the river bordering the fishery, is 5½ acres, and to which he has a deed, duly recorded, from one Jacob Thomas, who bought of one Edwards, who purchased of the Government. His title, therefore, seems good. The other Indians, alluded to in letter of December 4, up to this time, refuse to sell. They own about as much land along the fishery as Paluse Charley, and contiguous thereto, and it is believed if their lands could be purchased also, that the two lots would be sufficient for the Indians now complaining, or at least they they could be placated with this portion of the fishery.

I therefore recommend that the 5½ acres, which are unencumbered, be purchased at once from Paluse Charley at the price of $1,000, with the condition that he and his family be allowed to remain at the fishery, where they live, and allowed the right to take fish in common with the Indians, for whose use the Government will hold it, but not to take fish for the purposes of sale. It is quite probable that when this is done the Indians referred to as owning the adjoining lands can be induced to sell also. It is believed that they are now prevented from doing so by white men. Even if we should fail in the end to purchase any more of the fishery, I think the amount mentioned, 5½ acres, will to a great extent allay the complaint of the Indians. And should my recommendations to purchase this amount from Paluse Charley be approved, I suggest that the purchase be made as quickly as possible, in order that he may not be tampered with by white men and persuaded not to sell. I think the price very reasonable.

Very respectfully, your obedient servant,

GEO. W. GORDON, *Special Agent.*

THE COMMISSIONER OF INDIAN AFFAIRS,
Washington, D. C.

UNITED STATES INDIAN SERVICE,
Warm Springs Agency, March 12, 1886.

SIR: I have the honor to call your attention to a supplemental treaty purporting to have been made with the Indians of this reservation November 15, 1865, in which it is set forth that these Indians parted with their rights to take fish from their old fishing places on the Columbia River. Said treaty was made by one Huntington, who was then Superintendent of Indian Affairs for this district, and if ever a fraud was villainously perpetrated on any set of people, red or white, this was, in my opinion, certainly one of the most glaring. And what is as strange as the treaty itself is the fact that this matter has been brought to the attention of your office by every agent who has been in charge of this reservation since the making of said treaty, and there is no evidence that there was ever any response to the letters or efforts made to correct the wrong.

And now, as the matter is being seriously agitated among these Indians, I deem it my duty to again set forth the facts, which will not vary from those stated by my predecessors, other than that I propose to give the evidence of several Indians in their own words as near as may be, as interpreted by Charles Pitt, and that of Donald McKay (who was then interpreter, and who is a man of good understanding) as stated at a meeting of the Indians held at this agency on the 3d instant.

William C. Parker (Indian), says: "That prior to the time Mr. Huntington came to the agency to make the treaty with the Indians requiring them to get passes from the agent when they desired to leave the reservation, that Mr. Reves, who was then the agency farmer, told me that Huntington was wanting something from the Indians, and for me to look out for him. Reves did not want to tell me what was wanted, but I insisted that he should tell me, and he told me that Huntington said that the Indians were continually running to the Columbia River fishing, and they would be no good as long as they had access to the fisheries, and that he wanted to put a stop to it and wanted to get the fisheries away from them; and that Huntington said that the Indians were taking their women to The Dalles and trading them to white men for whatever they could get.

"I told Chief Mark (who is now dead) what Reves had told me and for him to be on the watch. Mark and I came down to see Mr. Logan, the agent, and Mark said to Logan, how much does Huntington propose to pay us for the fisheries? Logan said he knew nothing about it. Mark then said if Huntington would give us a large ship loaded with solid gold we would not sell the fishery; he said we would use all the money up in a short time but the fisheries would stand forever, and we will never sell it.

"Finally Huntington came and called the Indians together at once. I knew that he had come like an Indian gambler to wrong us out of our fisheries, but I could not tell in what way he intended to do it.

"Huntington commenced by saying to old Pish-wa, why did Quah-pah-mah and his band leave the reservation? Pish-wa said he did not know; he then said to me, Parker, do you know why Quah-pah-mah and his band left the reservation? I told him I did not know. He asked all of the Indians if they had any knowledge of making a treaty with the Government. We all said yes, we made a treaty with the Government. He said to the Indians, you have made a treaty and you must remember that the land east of the reservation and north of Oak Grove is the white man's land and you should have passes when you go off the reservation, so you could have protection from the white man. You should not go off only for a given length of time, say 1 or 2 weeks, or a month, and then come back on the reservation when your time is out; in that way the young people would not be continually running all over the country and doing no good on the reservation. Now if you will agree to always get passes when you go of the reservation I will give you 30 head of work cattle and 100 blankets. While Huntington was talking this way, the old people got to talking among themselves, and decided that it was a good plan, and they thought they had better sign the agreement and always get passes to be absent from the reservation for a given length of time.

"Huntington pointed out quite a number that he said were good men and told them they had better all sign, s s this paper would go back to Washington. So there were quite a number signed.

"I understood the English language pretty well at that time and I did not hear Huntington say anything about the fisheries.

"After some little time we received the cattle and the blankets. And here I might say that a pair of blankets was cut into 3 pieces and we got 100 pieces of blankets.

"In a few months after we had received the cattle Huntington came along and wanted to go to Klamath to do some hauling. He asked Captain Smith, who was then agent, if he could get the cattle that he let the Indians have and one new log truck and two large 4-horse wagons. Captain Smith told us that Huntington wanted to borrow the cattle and wagons and would return them; we agreed to let him take them, and we have never seen cattle, log truck, the two wagons or Huntington since.

"Some time after Huntington had gone with the cattle and wagons the news came to us that we had sold our fisheries, and we were told by different white people that we had sold our fisheries. We denied it then and have always contended that we never sold our fishery. We afterward heard that Huntington had died.

"As soon as I heard of the fishery matter I went to Captain Smith, the agent, and asked him if he ever heard Huntington say anything about buying our fishery; he said no, I heard nothing of it.

"I then asked the Captain to write at once to Washington and inform the Department that we never sold the fishery to Huntington. I then said to the Captain if I had a hired man and he should go out and steal something for me that I would not accept it, and that this was a parallel case and the Government should not receive property stolen by a hired man like Huntington. The Captain said that was true and he would attend to it at once.

"I afterward asked the Captain if he had written; he said yes. And he repeatedly informed me afterwards that he had received no reply to his letter. And finally the captain said there was no use in saying anything more about it, as it was published everywhere that we had lost our fishery and there could be nothing done.

"All this was done by the Republican party, I might call it our own party, but they wrongfully took this fishery away from us. Now will the Democratic Party still maintain this action and keep our fishery away from us?

"This fishery was stolen from us and is worth mints of money to us; it has served us for years and years, and is just as good to us now as it ever was. A shipload of gold would not buy our fishery. We have been robbed of it. The

President of the United States and the authorities at Washington may think this is idle talk, but we mean what we say and want that fishery back. There are only three men who claim to own it now and they are a small part of the people of the United States, but it is of much more value to us than to any other people.

"When we go to the fishery the white people threaten us, and some Indians have been whipped and beaten by the whites; on Sundays, when the whites are not fishing, sometimes the Indians slip in to fish, but when caught are treated rough. The Indian cannot understand why he should be deprived of the sport and food of which he is so fond.

"We feel that we are under the United States Government and we belong to no other, and we leave this matter to the conscience of the authorities. I am not embarrassed or backward about crying to my Government for [what] rightfully belongs to me.

"I have laid in a strong claim for our fishery, and I will give you my reasons for making such claim.

"General Palmer, when making the original treaty, told us that we should have the right to the Columbia River fishery always, and we should have it for our own for all time. General Palmer said the white man would never want those rock, and all it was fit for was a fishery, and it shall be yours forever; he said the country would be settled up between the reservation and the fishery but there would be a way provided for us to always get to the fishery for our fish and to the mountains for berries and game."

John Gadshaw (Indian) says: "We feel that we now have an agent who will see that we have our rights. What Billy Parker has stated is all true and most of it word for word of what was said at the time the treaty was made. I was there when the treaty was made and the words used by Parker are just as said by General Palmer, and these places were pointed out as stated.

"The truth has been told about the fishery, and all we claim was what Palmer told us at the time, that we should have the fishery always. We ask protection of the authorities, and ask nothing only what rightfully belongs to us. I will raise my right hand toward Heaven and ask in God's name will you not give back to us our fishery which rightfully and lawfully belongs to us."

Thomas Schoola (Indian) says: "I signed the treaty requiring us to get passes to leave the reservation, but I will swear I never heard anything about parting with our right to the fishery."

Peter Hull (Indian) says: "I signed the treaty requiring us to get passes, but the fisheries were never mentioned."

Ta-simp (Indian) says: "I was the interpreter from the Warm Springs to the Wasco language at the time Huntington made the treaty with the Indians in regard to getting passes. All that was said at the time Huntington said if you sign this paper you are not to go off the reservation without a pass; that the matter of fishery was never mentioned."

Wal-en-ten-an (Indian) says: "I was one of the signers of the treaty, but I never signed my fishery away."

Holliquilla (Indian) says: "In the first talk with General Palmer about a treaty our forefathers were speechless for many days. After many days' talk General Palmer saw that the fishery was a very important matter in the treaty, and he said you need not sorrow about the fishery, that will be set aside for you for all time.

"When the money consideration was made in connection with the fishery, it was then that our hearts gave way as if shot with an arrow, and we were willing to sign the treaty.

"I was one of the signers to the treaty to get passes, but I never sold my fishery, nor did I hear anything about the fishery at the time."

Dry Creek Billy (Indian) says: "I signed the treaty to always get passes, but I never heard the fishery mentioned. When we first heard that we had sold our fishery I denied it to Captain Smith, the agent, and said we never sold the fishery."

John Howey (Indian) says: "I have been listening to all the speeches here, and what they have said is true; our forefathers never sold our fishery; neither did we. The fishery I will never foget; it is mine. I am now old and not able to till the soil, and I have a great desire to have free access to the fishery to furnish me food, as it did in former days. There are three white men who claim to own the fishery, and at one time, when I was standing on the rocks fishing, they came and stabbed me with a knife. I now ask for help from the new men who are in authority."

Bob Ska-now-way (Indian) says: "This people never sold the fishery and no Indian on this reservation ever understood they they sold the fishery, to my

certain knowledge. I once went to the fishery to get fish and came near killing a white man, named Evans, who claimed to own the fishery. He used to beat the Indians with clubs; and we have been shamefully treated by the white man at the fishery. In the fight I had with Evans he finally agreed that I might get some fish, but it was because I got the best of him in the fight."

Pat Mitchell (Indian) says: "I was one of the interpreters when the original treaty was made with General Palmer. I understand English pretty well. I was present when the treaty was made requiring Indians to get passes. I desire to say that the whole matter as represented by Huntington in regard to our fishery was a malicious lie; there was nothing said about the fishery. I think he lied himself to death. He told us that General Grant said every Indian must have a pass to go off the reservation. He then said to the Indians: 'Will you agree to always get passes when you leave the reservation? If so, sign this paper.'

"After Huntington left here he reported that the Indians had sold the fishery to him, which was a lie. I will say to my friends it is not worth while to argue the matter. We simply ask the Government to give the fishery back to us, and you can do so if you desire, as you have the authority to do it. I will swear before the white man's God that we never sold the fishery, and we demand that it be given back to us. We respect the Government but not the man who stole the fishery from us or the men who claim to own it now."

Johnson (Indian) says: "We never sold our fishery; it was never sold by our forefathers, and we have never sold it.

"When Hungtington was here we never knew him to be sober, he was always drinking; he said when these Indians went to The Dalles they did not mean any good, that they went there to loan their wives, daughters, and sisters to the white man for money, which was a lie so far as we were concerned as a people. A single case should not condemn the whole population of our reservation; he knew that we were ignorant and he could take advantage of us, which he did.

"I will say to our agent here that if we have said any wrong in the matter he should correct us. I will also say to the agent, 'You personally knew the reputation of Huntington and you know that he died a drunkard.' There are only three men who claim to own the fishery, and we do not desire to make any threats against them, for we have a government which we respect and which we look to for our rights and protection.

"William C. Parker again says, 'As Donald McKay is here, who was the interpreter at the time the treaty was made with Huntington on getting passes, I would like to have him state in the presence of Mr. Wheeler, the agent, and Mr. Patterson, the clerk, what he knows about the making of the treaty with Huntington, and if anything was said about the fishery.' "

Donald McKay (Indian) says: "I was interpreter when Mr. Huntington was here making treaty with the Indians in 1865, in regard to their obtaining passes from the agent when they desired to absent themselves from the reservation. I interpreted the treaty to the Indians as read to me by Huntington, and the matter of the fishery on the Columbia River was never mentioned. Afterwards Captain Smith, Dr. McKay, Mr. Huntington, and I were together and had a talk about agency matters, but nothing was said about the fishery. At this time Hungtington borrowed the cattle he had furnished the Indians on treaty and took them to Klamath, and some time after Huntington had gone with the cattle, Dr. McKay saw in a newspaper an account of the treaty with the Warm Springs Indians, stating that they had sold their rights to the Columbia fishery to the Government. Dr. McKay showed the item in the paper to Captain Smith, who remarked at the time, 'That is a downright swindle.'

"I am well known at Washington as well as on this reservation. I have spent a great deal of my life with these Indians, and I feel that I am one of them. I am now all crippled up, not with old age, but with wounds received while in defense of my country and flag in the employ of the Government. I fought with these people for the lands they now occupy. I have led them against the Snake Indians and against the Modocs, in the defense of our country, at the request of the Government, and from the effects of such service I am now limping around almost as helpless as an old woman. The services which these people have performed for the Government is well known at Washington, and should, in my opinion, have some weight with the Department in the adjustment of claims of these Indians.

"What they are asking for they need and in right should have, as it is well known by all persons who have visited this reservation that there is scarcely enough tillable land within the bounds of the reservation to support those who are here if it was farmed by good experienced farmers. As I have stated I was the interpreter at the time these Indians are talking of. I interpreted truthfully for

my people, and I do not want to take the side of the white man against the rightful interest of my own people.

"I insist that these people need the help they ask for and I shall always contend for their rights."

I have given you the evidence of a few of those who were present at the meeting. I am satisfied that every Indian on the reservation would testify to substantially the same story.

To substantiate the action of the Government in taking away the fishery from these people to which they are so endeared by long occupancy and custom, it has been said that fish diet was not good for Indians, and that they would do much better if they were compelled to dig their living out of the ground. It has also been said that "what is good for the goose was good for the gander." Now if Columbia River salmon is worth 20 cents per pound in the eastern cities and sought after as wholesome food for white people, why is it that fish diet is so detrimental to the health of the Indian who has been accustomed to it and made it the principal part of his food for hundreds of years?

As for the Indians wasting time at the fishery, I might say that one family can go to this fishery and catch and put up enough salmon in 2 days for a year's supply. There does not seem to be a disposition to loiter around the fishery or The Dalles, except perhaps by a few worthless Indians who would not work on or off the reservation; but there is no larger proportion of loafers among these Indians than would be found among the same number of whites. Now as to the evidence we got on this matter, of course it is all given from memory, but it must be remembered that this is not a new project, but has been kept fresh by being agitated continually every since the Indians first learned that their fishery was taken away from them.

I have reason to believe that their story in the main is true, and that something should be done for their relief as soon as possible. I think perhaps some arrangement might be made by purchasing a small tract or place where the Indians could have access, and where they could get all the fish they want, without discommoding the owners of the fisheries to any great extent.

Fish is certainly a very necessary food for these people, especially the older ones, as they understand how to preserve it for winter use, and is a much cheaper meat than they can obtain in any other way. Fish to an Indian is as bread to a white man.

It has also been suggested by some of the leading Indians that if they had access to the fishery it would be an easy matter for them to salt down a few barrels of salmon, which could be brought here with little expense, for the use of the schools during the winter and spring, when the beef is poor and the children would enjoy it for a change, besides being quite a saving in the running expenses of the schools.

I sincerely hope you will give this matter your early attention. The Indians are very anxious to have some response from the Department.

Very respectfully,

JASON WHEELER,
United States Indian Agent.

THE COMMISSIONER OF INDIAN AFFAIRS,
Washington, D. C.

[Extract from Annual Report of the Secretary of Interior of 1887]

INDIAN FISHING PRIVILEGES

In 9 or more treaties made in 1855–56 with the various tribes in the extreme northwestern part of the country it is provided that "the right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing" (12 Stat., 927–975).

Many and serious complaints have come to the Department that the right of taking fish at usual and accustomed grounds and stations along the Columbia River is denied to the Indians. Investigation has disclosed the fact that settlers have entered and possessed the tracts comprising the usual fishing grounds and stations under the land laws of the United States, and refused to allow the Indians to come upon them in the pursuit of their usual means of support. In behalf of the Yakima Indians resort was had to the Supreme Court of Washington Territory in case of *United States and others* v. *Taylor*, wherein the court, in decision rendered on January 25, 1887, held that the land laws of the United States

"simply authorize the appropriation by the settler of unappropriated lands, and only authorize the extinguishment of the title which the Government holds at the time of the appropriation; and, if the land selected by the settler has at such time any servitude or easement impressed upon it, he takes subject thereto."

This wholesome decision, so eminently just, ought to go far in removing the cause of many complaints from the Yakima Indians, who are mainly self-supporting. If they cannot be secured in the enjoyment of their treaty rights and privileges in this respect in any other way, it perhaps would be well for the Government to repossess itself of the portions of land upon which the servitude or easement is impressed.

The situation in this respect of the confederated tribes and bands of Indians of middle Oregon and the Warm Springs Agency is attended with more embarrassing difficulties. They were among those to whom were reserved and secured by treaty of 1855 the fishery rights and privileges, but a subsequent treaty made with them in 1865 contains a clause relinquishing them for a consideration of $3,500. The Indians claim that it was never intended by them to part wholly with such valuable rights and privileges for such an inadequate sum, but that the enjoyment thereof should be regulated by permits or passes, to be issued by their agent, to prevent them from being taken for hostiles when off of their reservation. In support of their claim they point to the third article of the treaty which provides for such passes in cases when it is necessary for them to go without the reservation.

General Gibbon, commanding Department of the Columbia, has given this matter some consideration, and thinks that the view given by the Indians is correct; he also reports that in being debarred from procuring their usual supply of salmon, and with short crops this year, there will be suffering among them unless they are furnished with supplies by the department; and he suggests as a remedy that Congress be asked to appropriate a yearly sum for a term of years to be expended in the purchase of cured salmon for issue to these Indians as an indemnity for the supply unjustly cut off from them.

The Klamath River Indians occupy a reservation in California established by Executive order of November 16, 1855. It embraces a strip of country 1 mile in width on each side of the Klamath River, for such distance from the Pacific Ocean as to include 25,000 acres of land. The fisheries on the river have been the principal means of support for these Indians.

The State of California having declared the Klamath River to be navigable from its mouth to a point some distance above the reservation, certain white men have engaged in fishing on that stream within the boundaries of the reservation. This the Indians regard as an invasion of their rights, and it has naturally made them uneasy. The honorable Attorney General, to whom application was made for an opinion as to the power of the Government to protect these Indians in the enjoyment of what they claim to be "their fishing privileges" in the Klamath River within the limits of their reserve, holds that—

"The Klamath River being a navigable stream, the public have the right to fish there and use it in any other way that does not amount to an interruption or interference with interstate or foreign commerce or navigation, or a violation of some law of the State of California, and that so long as the acts of persons resorting to these waters to take fish fall short of invading the right of Congress to regulate commerce with foreign nations or among the several States, no case for Federal interference can be said to exist."

The fishery rights and privileges of these Indians is a matter of serious concern to them. The improved means and appliances employed by white men for taking fish from the rivers place the Indians, who very generally adhere to their primitive methods, at great disadvantage in pursuing this industry. It is the source from which many of the Pacific coast Indians procure their principal article of daily subsistence. Large quantities are cured by them for winter use. It is very important that they be protected from invasion or obstruction of their rights and privileges, whether they be proprietary on existing reservations or reserved and secured by treaties to be enjoyed in common with others within territory ceded by them to the Government, or within the public domain. Without such protection they will be practically robbed of the main article of their food supply by being shut out from the sources whence they have heretofore obtained it, and without which they are likely to be impoverished and become largely a charge upon the Treasury of the United States for their support.

STATEMENT OF FRANK NASH, ATTORNEY, OF PORTLAND, OREG.

NEGOTIATION OF CONTRACT PRICE

Mr. NASH. You have asked that we be brief. There is only the matter of the contract which has not been covered in the earlier statements. We would like to explain briefly to the committee the way in which the contract price was negotiated. When it was determined that the dam was to be built in the fall of 1951, we on behalf of the Warm Springs people started negotiations with the district engineer.

The first problem, of course, was an appraisal of the property of the Indians. Fortunately, at about that time the State fish commissions, for the Oregon and the Washington Department of Fisheries, came out with a report of a joint report of statistical studies which had extended back over 17 years. According to that study the Indians were shown to have taken from the Indian dip net fishery at Celilo an average annual catch in excess of 2½ million pounds of fish.

VALUE OF FISHERY

That was valued, at different prices for commercial and subsistence fish, at approximately $700,000 a year which, capitalized at 3 percent, represents the $23 million figure negotiated for the fishery. That figure, although not entirely acceptable initially to either the engineers or to the Indians whom we represented, was reached as the final and best figure which could be negotiated for the Celilo fishery.

DISTRIBUTION OF VALUE

Then we faced the problem of how to distribute among the Indians the value of the fishery. There were many and complicated factors to be taken into account. Ultimately it was determined that since there have been intermarriages among the three major treaty tribes and since the tribal distributions at the time the Indians were separated to the reservations were somewhat inaccurate in 1855, the fairest approach to the problem for all concerned was to divide the value of the fishery among the three major tribes on the basis of population, reserving from the total consideration a sum which was considered to be adequate and equitable for a group of unaffiliated Indians who are resident at the river but not enrolled with one of the three major treaty tribes.

It was upon that basis that we negotiated the figure for the Warm Springs Indians of $4,047,000 and it is that figure which has been approved by the Chief of Engineers, by the Commissioner of Indian Affairs, and by the Secretary of the Interior.

Senator KNOWLAND. What is the approximate population of the tribes?

Mr. NASH. The Warm Springs and the Umatillas are approximately the same in size. The Warm Springs figure is exactly 1,078 enrolled Indians as of the date we arrived at the final figure. That figure has been increased just very recently, but the earlier figure is the pertinent one.

TOTAL TRIBE MEMBERS

The Umatillas have an enrolled number of approximately 1,100. Mr. Luce could give me that exactly.

Mr. LUCE. 1,118.

The Yakima nation referred to as the Confederated Tribes of the Yakima Reservation has a population figure of 3,637. The percentages approximate 20 percent for the Warm Springs, 20 percent for the Umatillas, and 60 percent for the Yakimas.

Senator DWORSHAK. Aren't the Nez Perce included in that?

Mr. NASH. I must take refuge in the same statement Mr. Luce made. We can speak only for our people. The engineers spoke to us about plans they have had for the Nez Perce.

Thank you very much.

Mr. BROWN. Mr. Charles Jackson, chairman of the tribal council, is the next witness.

CONFEDERATED TRIBES OF WARM SPRINGS INDIANS

STATEMENT OF CHARLES JACKSON, CHAIRMAN OF THE TRIBAL COUNCIL

WILLINGNESS TO SETTLE

Mr. JACKSON. Mr. Chairman and members of the committee, I have not got a written statement to present to the committee so I will just give a brief history of my people.

Before the treaty of 1855, the Confederated Tribes of the Warm Springs Indians lived and occupied the south banks of the Columbia River. After the treaty they were removed to the Warm Springs Reservation as it is now. Since that time they have come down year after year to fish and take fish home for their subsistence use.

Two years ago the matter of the Dalles Dam came up. My people objected to the construction of the Dalles Dam bitterly. But as the years went by they realized that it was needed for the national security, so they reconsidered their position and are now willing to settle for whatever the engineers offered.

I do not believe I have any more to say, Mr. Chairman.

Senator KNOWLAND. We are glad to have you.

Mr. BROWN. Mr. Frank Suppah, also a member of the committee, from the very beginning, that helped negotiate the contract for the Warm Springs Tribe, will be the next witness.

CONFEDERATED TRIBES OF WARM SPRINGS INDIANS

STATEMENT OF FRANK SUPPAH, REPRESENTATIVE

20 PERCENT COMPENSATION ENTITLEMENT

Mr. SUPPAH. Gentlemen, my name is Frank Suppah. I am here representing the Warm Springs Reservation Tribe.

According to records, in 1855 a man named Joel Palmer, head of Indian Affairs in the Oregon Territory, came there and made a treaty with my people. In that treaty he reserved the rights to deep fish

along the Columbia River. There were several diffferent groups of Indians concerned.

After listening to testimony here today it makes me look back to the records. My people are absolutely entitled to that 20-percent compensation. That is for the simple reason my people opposed the dam to start with, so when Congress said that the project was a defense project, the people agreed to it.

Therefore, I think my people are entitled to that payment of $200,000 this year in December. We hope the committee will consider that.

Senator KNOWLAND. Thank you very much.

Mr. BROWN. In closing I want to add what Mr. Luce has said. We have been negotiating for 2 years with the Army engineers. There was no coercion. We tried to represent these Indians to the best of our ability, attempting to get as much as we could for our clients.

We went into it carefully and made checks of the catch of salmon by the Indians and the use of the salmon for subsistence as well as for commercial purposes. There was no coercion.

Thank you very much.

Senator DWORSHAK. Would your Warm Springs Tribe prefer to have the fish or the money?

Mr. BROWN. I heard an Indian make this statement at our last tribal meeting: If you offer to give me the fish or one million dollars, I would take the fish.

Senator DWORSHAK. You would, too, as a representative of the tribe?

Mr. BROWN. They would like to have the fish.

Senator KNOWLAND. Thank you very much.

We will now hear from Mr. Harison Lott.

THE NEZ PERCE INDIAN TRIBE, IDAHO

STATEMENT OF HARRISON LOTT, REPRESENTATIVE

TREATY NEGOTIATION

Mr. LOTT. Mr. Chairman and honorable members of the committee of the United States Senate, it is an honor and a privilege to appear before you this afternoon. We were not notified about this meeting. I don't know why it is the Nez Perce have been taking a back seat, but when you consider the treaty of 1855 negotiated at Camp Stevens in Walla Walla Valley in Washington Territory, in May and June of that year, you will find and read in there that the treaty was negotiated between Joel Palmer, superintendent of Indian affairs for Oregon, and the Governor for the Territory, Isaach Stevens.

Negotiations were carried on between these two official representatives and the Nez Perce Tribe of Indians who occupied lands lying partly in Oregon and partly in Washington Territory up to that treaty.

We have always relied upon the honesty and the faithfulness of the Government. So we thought it was not important to hire an attorney because we knew that we had a binding obligation in regard to the Government, that our treaty was binding and that was sufficient.

FISHING RIGHTS GUARANTEED

We were guaranteed those rights to fish in the fishing location which meant between the Cascades in the west and the Bitter Root Mountains in the east.

If you will examine my copies of my statements and if the statement contained therein is not consonant with the treaty, then you can throw it in the wastepaper basket.

If those are the facts, then you can give it a careful examination.

You have heard these attorneys. We have no attorney, but I would like one of my tribesmen to have a few minutes to talk to you.

I notice that you are allowing men only 5 minutes. I could talk for some time. Some of the witnesses have brought out about their patriotism. I mean the Indian boys.

MILITARY BACKGROUND

I happen to be the commander of the All-American Veterans Post of Foreign Wars No. 6923. I was also a charter member when we organized in 1946. I served in the First World War in the 91st Division.

I went through Verdun and the Meuse Argonne, into Belgium, Luxembourg, and Germany. We have boys that are veterans who have been in the Philippines and who have been imprisoned in carrying on the last war. We have men that have fallen and they are men who have done their duty. You won't have to worry about the Nez Perce as far as them being willing to fight for their country. They love their country regardless of how the United States Government mistreats them.

The treaty of 1863 is a matter of record. That is still a treaty, negotiated, signed by a puppet chief who betrayed his own tribesmen when he signed that. If there is any doubt in your minds, I wish you would read the report of the tribe, or, rather, the record of the tribe.

There is one very good book, and there are others.

I have an affidavit made in 1910, and I did not make 20 copies of it, but I wish to present it for the record with my statement. This affidavit that was made in 1920 by one of the members of the Nez Perce Tribe who is residing in The Dalles, Oreg., area, says that he was in The Dalles, Oreg., area in 1863.

After that treaty he had to come home. He died in Idaho on a reservation. When he made this sworn statement he was 85 years of age. That was in July 1910.

Senator KNOWLAND. Your statement may go into the record in full and then this affidavit to which you have referred.

(The material referred to follows:)

STATEMENT OF THE NEZ PERCE TRIBE OF INDIANS OF THE STATE OF IDAHO

The Nez Perce Tribe of Indians herewith beg and respectfully submit for careful study and consideration that their solemn treaty, negotiated, agreed, signed, and concluded together with the Indians of the Confederated Tribes of the Yakima Indian Reservation, on June 11, 1855, with the United States Government, is comparable, identical, and a perfect counterpart of the treaties negotiated and consummated simultaneously at Camp Stevens, Walla Walla Valley, Washington Territory.

That Gov. Isaac I. Stevens acknowledged that the Nez Perce Tribe of Indians were the strongest and most powerful tribe of the Northwest. That the Nez

Perce Tribe of Indians occupied lands lying in the Columbia Basin between the Cascade in the west and the Bitter Root Mountains in the east. That this westernmost boundary was recognized only in the treaty (12 Stat. 957) of the Nez Perce Tribe of Indians, in June 11, 1855, Camp Stevens, Walla Walla Valley, Washington Territory.

That in this council meeting, at Camp Stevens, the Indians ceded to the United States, their right, title, and interest in a vast domain, the land they held in common, which they had roamed over and mutually occupied since time immemorial. There was, however, reserved to the Indians in treaties (12 Stat. 945) with the Walla Walla, Cayuse, and Umatilla (12 Stat. 951), with the Yakimas, and last but not least (12 Stat. 957), with the Nez Perce "* * * the exclusive right of taking fish in all the streams where running through or bordering said reservation, is further secured, to said Indians, as also the right of taking fish at all usual and accustomed places in common with citizens of the Territory * * *."

That the Congress of the United States authorized the construction of the Dalles Dam in Oregon, which will eventually flood and destroy the Celilo Falls the last remaining usual and accustomed fishing station prominently mentioned and included in various treaties of the Indians of the Northwest.

The United States stands in a position of guardianship and trust with reference to the Indians, and their fishing rights, reserved and protection guaranteed to them, in the former treaties, and officially recognized by Isaac I. Stevens and Joel Palmer.

That the construction of the Dalles Dam will completely destroy one of the oldest usual and accustomed fishing location—the Celilo Falls. The Indian fishermen are bewildered and confused over the loss of this old traditional Indian sanctuary, where salmon have been plentiful throughout the years. That these fishing rights of the Indians were recognized and were pledged protection from any molestation in their fishing activities indefinitely, in the solemn treaties negotiated and concluded in June 1855. Where their forefathers had fished since time immemorial, Celilo Falls will go down in the American history as the last stand of the Indians of the Northwest, participants of the "long council" Camp Stevens, Walla Walla Valley, Washington Territory.

TREATY WITH THE NEZ PERCES

Articles of agreement and convention made and concluded at the treaty ground, Camp Stevens, Walla Walla Valley, this 11th day of June in the year 1855 by and between Isaac I. Stevens, Governor and Superintendent of Indian Affairs for the Territory of Washington and Superintendent Joel Palmer for Indian Affairs for Oregon Territory, on the part of the United States, and undersigned chiefs, headmen, and delegates of the Nez Perce Tribe of Indians occupying lands lying partly in Oregon and partly in Washington Territories, between the Cascade and the Bitterroot Mountains, on behalf of and acting for said tribe, and being understood that Superintendent Isaac I. Stevens assume to treat only with those of the abovenamed tribe of Indians, and Superintendent Joel Palmer, with those residing exclusively in Oregon Territory.

That on the 11th day of June 1855, Articles of Agreement and Convention were made and concluded at the treaty ground, Camp Stevens, Walla Walla Valley, Washington Territory between the United States Government acting through its duly authorized agent and representatives, Isaac I. Stevens, then Governor of the Territory of Washington, and Joel Palmer, Superintendent of Indian Affairs, for Oregon Territory and the Nez Perce Tribe of Indians acting through its chiefs, headmen, and delegates of the Nez Perce Tribe of Indians, and being duly authorized thereto by them, that this treaty was ratified by the Senate of the United States of America, on March 8, 1859 (12 Stat. 957), and accepted and proclaimed by the President of the United States, as a law of the land on April 29, 1859.

That at all times since said treaty of June 11, 1855, was originally made and concluded, as aforesaid treaty has been and still is in full force and effect.

Article 3 provides: "The exclusive right of taking fish in all streams, where running through or bordering said reservation, is further secured to Indians as also the right of taking fish at all usual and accustomed places, in common with citizens * * *"

Article 11, June 11, 1855: This treaty shall be obligatory upon the contracting parties as soon as the same shall be ratified by the President and the Senate of the United States.

That these rights of the Nez Perce Tribe of Indians are further carried in the 14 Statute 647, article 8, 1863 Treaty, with the Nez Perce. Article 8: It is also understood that the aforesaid tribe do hereby renew their acknowledgments of

dependence upon the Government of the United States, their promises of friendship and other pledges, as set forth in the eighth article of the treaty of June 11, 1855, and further that all provisions of said treaty, which are not abrogated or specifically changed by any article herein contained shall remain the same as to all intents and purposes as formerly the same obligations resting upon the United States, the same privileges continued to the Indians outside of the reservation, and the same rights secured to citizens of the United States as to right-of-way upon streams and over roads which may run through said reservations, as are herein set forth.

That in 1893 agreement, 28 Statute 326, article 11, further provides: That existing provisions of all former treaties with said Nez Perce Indians not inconsistent with the provisions of this agreement are hereby continued in full force and effect.

That under the aforesaid provision of said treaty of June 11, 1855, there was reserved to the Nez Perce Tribe of Indians, and to its members in perpetuity, the right to take fish at all usual and accustomed places, and in addition thereto, an easement to enter upon lands adjacent to the usual and accustomed places and an easement to cross said lands, for the purpose of leaving said usual and accustomed places, and in further addition thereto, and an easement upon said fishing locations to fish at usual and accustomed places without interference in their fishing activities, by any person or any agency exclusive of the members of the Nez Perce Tribe of Indians.

That neither the Nez Perce Tribe of Indians, nor any of their forebears, nor their predecessors in interest, have at any time sold, assigned, transferred, relinquished, nor conveyed any of their rights and privileges, nor any part thereof, in and to the rights of fishery at their usual and accustomed fishing stations in and immediately adjacent thereto, in the Columbia River, as herein described, or any part thereof, to anyone whomsoever, nor have the Nez Perce Tribe of Indians abandoned said usual and accustomed fishing locations, nor has the United States Government ever in any manner limited or disposed of or authorized and provided for the condemnation of and just compensation, for these rights of the Nez Perce Tribe of Indians on the Columbia River.

The minutes and records of the "long council" meeting held at Camp Stevens, Walla Walla Valley, Washington Territory, in the months of May and June 1855, where the Indians of the Columbia River Basin were assembled in joint negotiations with the representatives of the United States Government—Isaac I. Stevens for Washington Territory and Joel Palmer for Oregon Territory. That time and again Isaac I. Stevens and Joel Palmer, duly authorized officials, assured the Indians that they will not be disturbed by any persons or any agency in their fishing activities in the usual and accustomed fishing stations in the Columbia River and its tributaries. That one of the most important usual and accustomed fishing stations is the Celilo Falls located in the Columbia River between the Cascade n the West and the Bitterroot Mountains in the East. That the Nez Perce Tribe of Indians occupied lands lying partly in Oregon and partly in Washington Territories, between the Cascade and the Bitterroot Mountains. That all these circumstances were recognized and acknowledged by Isaac I. Stevens and Joel Palmer in the treaty of June 11, 1855.

That these rights to fish at the usual and accustomed fishing stations outside of the reservation in the Columbia River of the Nez Perce Tribe of Indians were emphatically reiterated, reaffirmed, and furthered in a direct statement made to and for the benefit of the Nez Perce chief, Lookingglass, on Saturday, June 9, 1855, by Gov. Isaac I. Stevens, at Camp Stevens, Walla Walla Valley, Washington Territory. Stevens: "I will ask of Lookingglass, chief (of the Nez Perce Tribe) whether he has been told of our council. Lookingglass knows that in this reservation settlers cannot go, that he can graze his cattle on any of the lands not claimed by settlers, and he can kill game and he can catch fish at any of the fishing stations; all these he can do outside of the reservation * * *."

That Thursday, June 7, 1855, at the same council, Camp Stevens, Joel Palmer said: "We have heard what Five Crows has said, we want all these people to have 1 heart, they ought not to have 2 hearts. Our Great Chief (President) looks upon them all as his children, and I hope you will think on what is here said to you." Five Crows of the Umatilla Tribe being half-brother of Joseph, chief of the Nez Perces.

June 9th, Saturday, 1855. Joel Palmer speaking again: These words, same council: "If the Nez Perces are not ready, they can talk among themselves, and can come tomorrow. If the Cayuses, the Walla Wallas and the Umatillas are ready to do what yesterday they said they would, then the paper is ready for

them to sign, and tonight they can get their goods and go home when they please. The paper is also ready for the Yakimas if they choose to sign, it they can do so."

Governor Stevens: "The council will not adjourn till Monday morning and I trust by that time Lookingglass (a Nez Perce chief) will have thought the matter over and we will be able to agree."

Three treaties were simultaneously concluded on June 11, 1855, at Camp Stevens, Walla Walla Valley, Washington Territory, one with the Walla Walla, Cayuse and Umatilla Tribes of Indians, a second with the Yakima Confederated Tribes and third with the Nez Perce Tribe of Indians.

The most important provisions of the treaty, guaranteed to the Nez Perces, the exemption of their lands from settlement by whites, and the preservation of their grazing, fishing, and hunting rights. The Indians departed for their homes with "one heart": Therefore, be it hereby

Resolved, in summation of the foregoing, That we, the Nez Perce Tribal Executive Committee, acting officially for and on behalf of the Nez Perce Tribe pursuant to provisions of the official constitution governing said tribe, meeting in regular session on this 12th day of May 1953, do hereby proclaim and affirm that the Nez Perce Tribe of Indians, by virtue of the fact that the Nez Perce Indians have from time immemorial fished in the Celilo Falls fishing area and by virtue of the provisions of the treaty of June 11, 1855 (12 Stat. 957), have a vested right and equity in and to the said Celilo Falls fishing area in common with and to the same extent and degree as that of the Yakima, Warm Springs, and Umatilla Tribes, and be it further

Resolved, That as a result of construction of the Dalles Dam, which will inundate and forever destroy the said Celilo Falls fishing area and cause irreparable and permanent damage to the members of the tribe, the Nez Perce Tribe of Indians will expect and demand full and complete satisfaction and remuneration for all future damages which will be suffered by the tribe, said remuneration to be comparable to and on the same ratio and basis as that received by the other above-cited major tribes.

Attest:

WILLIAM N. STEVENS, *Chairman.*

EXHIBIT 92

LAPWAI, IDAHO, *July 10, 1911.*

STATE OF IDAHO,
County of Nez Perce, ss:

Henry E-nah-la-lamkt, being first duly sworn, on his oath says:

I am a member of the Nez Perce Tribe of Indians. I am about 85 years of age. I was about 29 years old when the treaty of 1855 was signed. My home was in The Dalles, Oreg., at the time the treaty was signed. I was a young man, and was present at the camp or council, and while I did not take part in the making of this treaty I heard a great deal about it and have good recollections of the condition of my people and the surrounding country at the time. I remember that the territory claimed by my people covered a vast area of country and that there was abundance of game, such as deer, elk, and bear, amply sufficient for the needs of the people. There was a great abundance of salmon in the streams. There was no time that our people ever wantd for meat or fish. From this source alone we had ample provision for our food and clothing. There were a great abundance of wild herbs, which we gathered for our winter use. While the treaty did not provide to pay us for the game or fish lost by reason of the large cession made, it did provide that we should still have access to the same, and provided further that a tract of land consisting of about 6 miles square at the forks of Pisquese Wenatchepom River should be set aside for fisheries on all the ceded lands and were provided with fisheries exclusively for their use, which was the greatest inducement offered us to make this cession.

When the treaty of 1863 was made, I was living at The Dalles, Oreg., and was not present at the council, but I know that a further cession was made of our remaining lands at that time, but do not know just how much. At the time of the making of the treaty of 1863 and up to present time my people understood that the privileges granted us under the treaty of 1855 is still in force—that is, that we still have the right to hunt and fish on any of the land formerly owned by the Nez Perces. At the present time, however, if a Nez Perce wishes to hunt and fish, even near his own home, he must procure a game license before he is

permitted to do so. Our people hold that this is in direct violation of their rights under the treaties and a confiscation of the principal part of the compensation they were to receive for their large cessions of land. We understand that the Shoshones, our neighbors, and other tribes to the south and east, received several hundred thousand dollars compensation for the loss of their game and fish, as well as pay for their cessions of land. I am told that our cession of land was made for a promise of less than 5 cents an acre under the treaty of 1855. The thing of the greatest interest to us at that time was the right and possession of the game and fish, and the fact that these were reserved to our people was considered as the greatest compensation for the cessions. When these rights were being taken from us and we were denied the privileges that we thought was secured to us, great dissatisfaction arose among our people. This had much to do with the trouble that arose between the Government and Joseph and his people.

While I have no personal grievances on account of money being withheld from me, I have seen enough of it to believe that it is not fair and just to our people, and I believe that our people should be allowed to designate by will how his property should be divided after his death; not only his interest in land, but his interest in tribal funds or tribal property. Of course, the laws of the State relating to dower and rights of children should be respected in the bill.

[SEAL] HENRY (his X mark) E-NAH-LA-LAMKT.

State of Idaho,
County of Nez Perce, ss:

Subscribed and sworn to before me this 10th day of July 1911.

[SEAL] STARR J. MAXWELL,
Notary Public.

My commission expires January 14, 1913.

(Taken from memorial of the Nez Perce Indians, exhibit 92—p. 113.)

NEZ PERCE RIGHTS

Senator DWORSHAK. You have heard previous witnesses testify that only three tribes were entitled to this settlement. You are contending the Nez Perce have just as much right according to the treaty which you have signed with the Federal Government?

Mr. LOTT. Yes, sir. Those were completed in June 11, 1885. They were agreed to on the same day.

Senator DWORSHAK. Has there been any cooperation between the Nez Perce and these other three tribes?

Mr. LOTT. No.

Senator DWORSHAK. What is the reason for that?

Mr. LOTT. We tried to work with them, but we could not. They do not recognize us. They say we have not the same rights that others have.

Senator CORDON. Have you talked with the representatives of the Corps of Engineers, too?

Mr. LOTT. Yes. We have had a meeting already, but it seems like they have had their minds made up before they met us. They had in their papers that they would allow us $1 million.

TRIBAL POPULATION

Senator MCCLELLAN. What is the population of your tribe?

Mr. LOTT. About 1,400. At the time of the treaty, there were four or five thousand. We were the most powerful and the strongest tribe in the Northwest.

Senator CORDON. Where was your home in those earlier days?

Mr. LOTT. We were scattered all over from the Cascades to the State of Montana. There are no boundaries between our reservation and Celilo Falls which would prevent us from going there.

General Howard said, "I am the man to put you on a reservation. We took this land away from you and we are going to put you back on this reservation."

Senator DWORSHAK. Have the members of your tribe fished each year just the same as the other tribes at Celilo Falls?

Mr. LOTT. Yes, sir; every year. I have been fishing there for a number of years.

Senator KNOWLAND. Thank you very much.

You may call your next witness.

THE NEZ PERCE INDIAN TRIBE, IDAHO

STATEMENT OF DAVID ARTHUR, REPRESENTATIVE

BACKGROUND OF TRIBE

Mr. ARTHUR. Mr. Chairman and members of the subcommittee, and dear fellow countrymen, may I go back a little bit further still, so that you may know how the Nez Perce started and what they have done?

In the year of 1805 when Lewis and Clark came west, the Nez Perce befriended the Lewis and Clark party.

Senator CORDON. What area were they in then?

Mr. ARTHUR. They were a nomadic people moving around. Lewis and Clark were on the clear water. History shows and the records show in the Smithsonian Institute that Lewis and Clark made this report:

> The Nez Perce live on either side of the Snake River in the area there and the Columbia River as far as The Dalles.

Do you adopt that historical report of Lewis and Clark? Bonneville came down. The Nez Perce befriended Bonneville and Bonneville said the same thing of the Nez Perce.

What were the Nez Perce doing at that time when they saw the fish? Certainly they were fishing.

Later on about 26 years later, four Nez Perce went to look for the Book of Heaven in the city of St. Louis. There they asked for the Book of Heaven. They went back empty handed, but what was the result?

They invited the pioneers and all the missionaries they could get. Spalding, Whitman, and Jason Lee and every other denomination came over there.

What happened? Mr. Whitman made a report of how dangerous it was to lose the Oregon Territory to the British on the north and also Russia and Spain. He came down to Washington and talked to President Grant, told him how precarious the situation was, that we might lose the Oregon Territory.

History tells us Whitman saved the Oregon Territory. Whose influence was it? The Nez Perce.

Furthermore, the Government report on the Nez Perce indicates that they were the leaders of the Northwest Indians. If you want to

doubt the report of the Government, then the Nez Perce have nothing else to say.

There is some report to indicate that the Nez Perce were at The Dalles even 30 years later. The mission work was growing. A new station was opened at The Dalles. Whitman was asked to go and act as an interpreter because of his knowledge of the Nez Perce language.

EQUAL COMPENSATION REQUESTED

Members of the Indian Tribal Committee, we are not here to fight you. We are here to cooperate with you. How can you oust the Nez Perce that have been the benefactors of the whole Oregon Territory?

The Nez Perce stood pat in order to keep the Oregon Territory American. Today we do the same.

If there is any benefit in making the dam, let it be so, so everybody will be benefited.

We would like to have compensation equal to what anybody else receives who is interested in the treaty of 1855.

I think for patriotic purposes if that dam is to be built, we would like to have it built, but we would like to be compensated equally as the others.

I thank you.

Senator KNOWLAND. The next witness is Chief Rising Sun.

AMERICAN INDIAN SUPPLEMENTARY AIDE COUNCIL

STATEMENT OF CHIEF RISING SUN, REPRESENTATIVE

PREPARED STATEMENT

Senator KNOWLAND. Your entire statement will be printed in the record.

(The statement referred to follows:)

Hon. Senator WM. KNOWLAND,
Chairman of the Subcommittee of the Army and Civil Functions of the Senate Appropriation Committee,
Washington, D. C.

HONORABLE SIR: Herein are 20 copies of the speech of Chief Rising Sun of Richmond, Va., New York City, and Boston, Mass., who has been invited to speak before your committee, May 18, 1953, at 11:55 a. m., in room F–39, Senate side of the Capitol Building.

Mr. Chairman of the Subcommittee on Civil Functions of the Senate Appropriations Committee, members of this committee, Indian chiefs and their aids, speakers and our guests, ladies and gentlemen, my name is Chief Rising Sun, also known as the Rev. Dr. Alzamon Ira Lucas of Richmond, Va., New York City, and Boston, Mass. I possess bloods that are seven-sixteenths Cherokee and one-sixteenth French, paternally, and four-sixteenths Spanish and four-sixteenths Holland (Pa.) Dutch, maternally, born in Oklahoma Territory, November 5, 1872, and have now reached the youthful age of 80 years last November 5, 1952; I will now give a kick to prove my youthfulness.

I have been offered a position by the Republican National Committee, in a letter, dated January 15, 1953. Artist Jimmie James, painter of the Columbia River, has written to President Eisenhower requesting that he appoint me as "Commissioner of Arts and Crafts and Public Relations' Responsibilities," which is the desire of the Washington, Oregon, and the Northwest Indians, and later suggested to the President that he appoint me as Commissioner of the Department of the Interior; but I say, for the present, a Caucasian should fill the above office.

On May 11, 1953, I wrote a letter to Mr. Charles F. Willis, Jr., Special Assistant of the President,requesting he hand my letter to the President, wherein I stated that Artist Jimmie James wrote the President—letter No. 1386—dated March 17, 1953, requesting that he appoint me to a position in the Government wherein I would serve as Commissioner of Indian Spiritual Welfare and Public Relation matters between the Government and the Indians, which offices I would accept and that for the above positions, the Government would consider this choice of mine over all other positions, for me. I pray the President is now considering this very essential office for future prevention and settlement of any and all matters between the Indians and our Government, wherein I would plead for the Government, if warranted, against the Indians, as I now plead against the Government for the Indians. By way of example, viz: "In a letter No. 1173 from Artist Jimmie James to the President, dated February 15, 1953, in which Mr. James wrote: "I wish to bring to your attention, the fact that the Indian people were deprived of their rights to defend their treaty, because the Department of Interior made the statement before the Senate that 'The Indian people were in accord with building the Dalles Dam (read p. 1444, Congressional Record)'." The above cannot be true, because, so states Artist Jimmie James, "I have contacted the Yakima Indian Tribal Council and those at Celilo Falls and they tell me 'We cannot sell our treaty any more than you, the white man, can sell your own graveyards or your churches.'" We do not want the money four our treaty; in fact, we cannot take it.

No concrete had been laid for the base of the dam, and we say: "Stop the construction of the Dalles Dam and restore the treaty for the Indian people."

Now, and right at this moment, thus far, I have quoted our head of the Department of the Interior, Hon. Douglas McKay, and referred you to a statement he made in the Congressional Record on page 1444, which letters I possess, and letters from Artist Jimmie James, representing the Yakima Indian Tribal Council, which letters, also, I possess. Does it occur to anyone of you of this subcommittee that I will be jeopardizing my fervent, unselfish desire to serve both my Government and my people with equal justice by appearing here to plead for my people, the Indians? If so, this my speech, will be a criterion of my sincerity, honesty, and courage to state the truth and the truth only, as it has been given to me, in facts, figures, and statements. May I be permitted to further substantiate my pleadings in requesting answers from the chiefs, if necessary, to my few questions? This should be allowed me.

I shall now begin my pleadings: No. 1. A treaty was made between the Party of the first part—the Government, and the party of the second part—the Yakima Indian Tribal Council, on June 9, 1855. I have written for a copy of the treaty to the Hon. Douglas McKay twice—(1) on March 28, 1953, (2) on April 28, 1953—and as yet, May 18, 1953, I have received no answer, because, no doubt, he favors the construction of the Dalles Dam and has so stated in the Congressional Record, page 1444, by his vote.

Nevertheless, I know that the record of all treaties by the Government to the Indians state, as to their duration, approximately "As long as the river runs, the wind blows, the sun rises and sets, and there is snow on the mountaintops in winter or summer."

My answer to each and all of the above durations of the treaty of June 9, 1855 is, viz: "All of these conditions exist today; none has ceased to this date—May 18, 1953.

No. 2. In the files of the Honorable Douglas McKay you will find my letter to him, dated April 18, 1953, wherein I requested him to mail me a copy of the treaty of June 9, 1855, since I desired to speak in behalf of the Yakima Indian Tribal Council, and I would pay for the copy of the treaty in advance, or, after receiving the same, invoiced, to pay by return mail. To this day, May 18, 1953, I have not received a copy of the treaty.

No. 3. In my letter to the Honorable Douglas McKay, dated March 28, 1953, in re mailing me a copy of the treaty, I suggested that he turn my letter over to Mr. Orme Lewis, Assistant Secretary of the Interior, who had previously written to me, March 5, 1953.

In Mr. Orme Lewis' letter he states: "The Dalles project was authorized by the Rivers and Harbors Act of May 17, 1950 (64 Stat. 163, 179), and funds for the prosecution of the project were made available in the acts making appropriations for the civil functions of the Army for the fiscal years 1952 and 1953 (Public Laws 203 and 204, 82d Cong.). Protests against the construction of the dam at The Dalles because of its effect upon the fishing rights of the Indians were made to the congressional committee which considered these appropriations, but the appropriations were nevertheless made.

'Construction of the project has been started by the Corps of Engineers of the Army, which has supervision thereof under the terms of the applicable legislation, and it is believed to be too late now to halt this construction or to select another site for the dam.

"While the Dalles project is the responsibility of the Corps of Engineers rather than that of this Department [Department of the Interior], it has been recognized by the Department of the Interior that the Indians will lose highly valuable fishing rights as the result of the construction of the dam, and that this Department should assist them [the Indians] in receiving just compensation for the loss of these rights. The Corps of Engineers in cooperation with the Fish and Wildlife Service of this Department, has been conducting a survey of Indian Fishing at Celilo Falls with a view to determining the amount of compensation to which the Indians are entitled.

"The Indians of the Umatilla and Warm Springs Indian Reservations have signified their willingness to accept compensation for the loss of their fishing rights, and it is the hope of this Department that the Yakima Indians, too, will perceive that there is no other alternative.

"This Department deeply sympathizes with the feelings of the Indians about this matter, and can readily understand their distress, since Celilo Falls has been not only a fishing place but also a shrine (for worshipping) of the Indians of the region for more than a century.

"While rights of property, whether they rest on treaty or other muniments of title, should not be lightly abrogated, such rights, whether those of Indian or non-Indian, must be yielded in the national interest, subject, of course, to the right to just compensation.

"Sincerely yours,

"ORME LEWIS,
"Assistant Secretary of the Interior."

No. 4. Gentlemen of the subcommittee of the Senate Appropriations Committee, may I inform you that my profession is that of a counselor of human relations and may I request that each of you read carefully my professional busir ess card and enclosures of seven items of reprints and circulars of myself and my mission on this earth, including a notarized document, exhibit A No. 1.—exhibits B, C, D, etc., so marked—after reading my letterhead (in Indian red ink) what I am doing by way of Organizing the Red Race in the Western Hemisphere, beginning in New York City, New York State, Virginia, and in the Commonwealth of Massachusetts.

Gentlemen, I am enclosing 8 exhibits, and I was indeed sad—very sad—to hear of our Democrats, in the years 1950–53 violating their word of honor by using fraudulent means, so speak the Yakima Indian Tribal Council, whom I am a representative at this 5 minutes' résumé.

It appears to me that the Corps of Engineers are entirely responsible for the breaking of the treaty of June 9, 1855. And yet the Department of the Interior has recognized these protests against the construction of the Dalles Dam, because of the Indians' fishing, hunting, property and worshiping rights being denied them—they were not consulted in the beginning; their offer to pay was after the beginning of the construction of the dam. The Indians did not, nor, today, do not wish to sell their birthrights for money, selling their graveyards would be like the white man selling their churches—yet the Corps of Engineers—knowing all the truth, as they were told by the Indians—went right ahead and began the destruction of the Celilo Falls.

The Department of the Interior contends that the Umatilla and Warm Springs Indians, via their chiefs, voted to proceed with the building of The Dalles Dam; nevertheless, I have been informed that the above Indians were not included in this treaty of June 9, 1855. "What right had these Indians and a few of the Yakima Tribe who were influenced by the mouthpiece of the profiteers to vote?" I have been told. Listen! There will be no war with Russia, and the Army will not need what is justly the rights of the Indian.

America is the greatest country in the world and she is expected to lead all nations, and the Rev. Dr. Henry Tudor Mason, who, 27 years ago, conceived the idea and founded the All Nations Association, Inc., and the Sons and Daughters of All Nations, Inc., who had specifications for the erection of buildings in the center of Manhattan Island for the Peace of All Nations. (His address is 546 Brook Avenue, Bronx, N. Y., apartment No. 8; phone, CY 2–6940. Make note of this.) I have added exhibit I, No. 9, in re Dr. Mason. So, what happened? The Rockefellers beat Dr. Mason to it and built Radio City; nevertheless the United

Nations Buildings, on the East River, stands as a monument for the first ideas conceived by Dr. Mason for world peace.

Gentlemen, you may recall the true story of the white man, his wife and five children, who, in search of gold, went West and stopped overnight on a reservation, eating supper and breakfast and then left for Washington, D. C.

There they received papers for "squatter's rights," and with four pieces of wood for stakes, approached the same chief of the reservation where they had been fed and slept over night. The white man said: "I'll drive these four stakes to make a boundary line—north, east, south, and west—around your ranch and return to tell you what I received from Washington, D. C." So he staked the chief's ranch, returned and said: "Now, chief, you move. This ranch now belongs to me." The chief answered by saying, "No. It's mine. You remember, I fed and allowed you and family to sleep overnight about 3 moons ago." "Well," said the white man, "Yes, it was 3 moons (3 months) ago; but now this ranch is mine. Get off quickly." "No! No!" cried the chief. "Bing! Bing!" went the pistol, and the chief was a dead Indian.

Now our Government allows her citizens and foreigners to invade our ranches or reservations—they seldom pick a forest, cut trees, clear the land, and till the soil—and the Indian packs his belongings and starts for another place to pitch his teepee.

Then our Government makes treaties with the Indians and states therein: "As long as the river flows, the grass is green, and the sun rises and sets, this treaty will endure"—but, comes the United States Army Engineers along and, without notice to the Indians, begins to construct a dam, and after protests from the Indians and many whites who stand for honesty and justice, the Army broaches the subject of indemnity to the Indians for their loss of their fishing rights, and this in itself is an acknowledgement of the Indian rights at Celilo Falls.

I have received information that the United States Army Engineers submitted a contract of agreement to the Yakima Tribe, offering them $13 million as compensation for the loss of Celilo Falls, and this amount would be about $3,500 for each member.

Many Indians earn about three times the above $3,500 or $10,500 a year by selling their catch. However, if they did sell, how long would $3,500 last each Indian—no home, no fish, no game? Why, in 2 or 3 years—no money, intermarry, no race—all white race; Indians become extinct.

Well, the Indians do not desire to sell, and it is stated that a dam could be built at the junction of the Deschutes River with the Columbia River, 3 miles above Celilo Falls—thus saving the fishery for the Indians and supplying the hydroelectric dam for irrigation and commerce, and control the level flow of water.

Gentlemen, what about the man who received $1,300,000—one million three hundred thousand dollars—the attorney for the Indians who lost his case before the Government? Is this just gossip, or is it the truth? I'd like to know his name and address, and so would over 300,000 people in Washington and Oregon States like to know. It will be so easy to know the truth about the construction of the Dalles Dam by just reading this letter and my exhibts—11 in all—to President Eisenhower, and let him in on the way Brother Truman and his administration from 1950 to now violated the treaty of June 9, 1855, with the Indians. For Brother Eisenhower is cleaning up the international mess and Congress and all the peoples of America are behind him; so say, "Mr. President, please command all further contracts and works cease, immediately, on the Dalles Dam, pending the full investigation by the Republican administration."

Then he will appoint an honorable, courageous, Christian committee, with powers and full intention to "dig, dig, dig to the very roots" the truth in re the construction of the Dalles Dam, to cost around $356 million and before it would be finished in 1957 just add another $100 million and the total would come to $456 million—nearly half a billion dollars. That is not much for a hydroelectric plant, but atomic energy is soon to appear and then what?

Just get word to President Eisenhower to stop the United States from breaking the 106th treaty with the Indians; and his administration, aiming to lead all nations in peace and good government, then mistreat and rob the Indians of "Communion with God via fish, instead of bread and water," and of their game and property rights when herein I have related that a dam could be built at the junction of the Deschutes River with the Columbia, 3 miles above Celilo Falls, thus saving the fishery for the Indians and supplying sufficient water for a hydroelectric dam for all purposes.

The Yakima Council claims, I understand, that the Government has not paid them what was promised them for the building of the Bonneville Dam, built

over 14 years ago. This is due them—but they do not desire money, and wish their treaty to be restored and to rebeautify Celilo Falls. A Republican administration investigation is the next step.

Gentlemen, the Yakima Council has for many years defended its rights in the courts, and in the Supreme Court in the *Tules* litigation (62 S. Ct. 862, 864). The Indians won their case.

Artist Jimmie James lived in the same town in which President Eisenhower and his parents lived, stating that Mr. President was raised by parents who were good, honest, Chri tian folks, and that he is sincere, honest, and courageous, and believes if he knew how the Indians feel about the matter—a minority—suffering and how they could not accept money for their fishing and hunting and worshiping grounds, he would request or command all further appropriation be stopped and all further construction on the Dalles Dam cease immediately, pending a thorough investigation by a Republican administration.

He will not be taking sides with either parties of the treaty; he will only desire to know the truth and the report of his committee of investigation of the building of the Dalles Dam will provide him with all the facts and figures in the premises and he, then, will know what next to do as the President of these United States.

Sincerely and aboriginally, I am for peace, truth, justice, and service,

Chief RISING SUN, Ph. D., D. D.,
International High Priest, League of Nations, Pan-American Indians (over 2 million) who live in Central, South, and North America, and National High Priest of the A. I. S. A. C. of America.

AMERICAN INDIAN SUPPLEMENTARY AID COUNCIL,
Richmond 20, Va., May 15, 1953.

CLERK, SUBCOMMITTEE, ARMY AND CIVIL FUNCTIONS,
Care of Senator William F. Knowland, Chairman on Appropriations,
Care of Senate House, Washington, D. C.

DEAR SIR: I received yesterday and mailed to you two very important documents to be added to my exhibit as exhibit J, No. 10 and exhibit K, No. 11 and I am herein enclosing, as a result of a new insight into the two above documents by (1) the former governor of Oregon, the present Hon. Douglas McKay, and (2) Hon. Richard L. Neuberger, State senator, 13th District of the State of Oregon.

The document entitled "Your Honor and the Indian" by Mr. Douglas McKay under the section entitled "What the Celilo Falls Area Means To the Indians," I have answered his six vital points, and all that he has to say to and including the headline, viz: "Some questions to be answered."

I have given to the man who has written nearly 2,000 letters on behalf of the Indian people of the Northwest in defense of saving the most beautiful falls in America (so states the eminent geologist, Mr. Amos Berg) known as Celilo Falls and the further construction of the Dalles Dam, a title and he shall hereafter be named by me and peoples throughout the Northwest and America as Artist Jimmie James.

I took the liberty to partially amend Senator Neuberger's document, entitled "Senate Joint Memorial No. ——" which, I understand, was too late for the legislature. I know that the term "food" should and does precede the words "income from salmon fishing," and after the words "Columbia River Highway's should come my amended words, viz: "and sightseers of the United States and the world."

I am now pleased to note that it was not Hon. Douglas McKay, but the former Secretary of the Interior, Mr. Oscar L. Chapman (from the record) who, before the Senate Appropriations Committee, stated, to wit: "I have been informed an agreement is now ready and that there is no opposition from the Indian group on this project."

Such testimony as the above, given to our present Chief of the Department of the Interior, who inquires thus, to wit: "Is our sacred word and treaty only a scrap of paper, that after 98 years can just be set aside at the whim of our legislators on the basis of untrue testimonial by misinformed high officials of our Government?" when we read in this same document the words of Mr. McKay, as follows: "We have not, nor have we ever been in agreement or accord with the Government's attempt to set aside our treaty. To us our treaty is as important as the Constitution of the United States."

Under the caption "Your honor and the Indian," near the close we find the headlines, to wit: "Some questions to be answered" which I shall endeavor to answer point by point, as follows:

1. No Indian who has fished at Celilo Falls could accept any money for pay to be denied their rights: (1) to eat fish, (2) to sell fish, and (3) to religiously "commune with fish," as do the white race commune, in any denomination, with "wafer or bread and wine."

The Government should pay all past obligations, before contracting new bills, and the Bonneville Dam, built over 14 years ago, has not been paid. That's why Mr. President cannot cut taxes to balance the budget, and that's why all Americans are behind and for our President Eisenhower.

2. Our way of government to give a minority group half holding a vast acreage of land a treaty, in exchange for over one-half the land that is now the State of Washington; and then to think that the Indians have no choice in a matter that so deeply concerns them—not even to be notified by our Government of the why the building of a dam—when, without destroying the most beautiful falls in America (so speaks Prof. Amos Berg, noted geologist), the dam could have been built at the junction of the Deschutes and the Columbia River? Positively no. It is not our way of government, nor should it have ever been the way of a few officials of our Government to aim to cheat, mistreat, rob, and starve, as I have heard, the Indians or any minority group of their rights to their food and communion, of any citizen.

Therefore, gentlemen, please notify Mr. President to command the practice of sincerity, honesty, and justice in the dealing with the treaty of June 9, 1855, between our Government and the Yakima Indian Tribal Council.

Our disgrace and habit for many years of breaking treaties—I think this is the 106th—with our first Americans, for which all civilized countries in the world have pointed their finger in shame.

3. Our sacred word and honor, in all our treaties with the Indians, has been only a scrap of paper, and the untrue testimony by well-informed high Government officials—knowing all the facts (it has been known and is on record, so I have been informed) has occurred, in the past; therefore, this subcommittee should now stop all appropriations to further the construction of the Dalles Dam, pending the command by Mr. President for a thorough investigation by the present Republican administration. Let us make our word honest and sacred henceforth, and prove to the world our leadership, of all countries, as becoming the first country of internal harmony, peace, and justice, in truth—one with God.

4. It is not fair or just to continue the building of The Dalles Dam while the Indians, who still hold (rightly, and so would you, and I hereby challenge anyone of this subcommittee, anyone in the Congress or our President, Mr. Eisenhower)—hold, I say, to their treaty, and are not in accord with selling all of their rights, to be robbed of their daily (1) food; (2) the right to sell fish and earn a livelihood, whereon for centuries their forefathers have been fed and earned a like livelihood; (3) of the right to their "religious fish communion services," no more than any truly religious person of any denomination would concur with being denied their "wafer or bread and wine," or to have their churches burned to the ground. The Celilo Falls is really and truly a church—a cathedral—to all of those who have fished there or communed there; therefore, the Yakimas and other Indians protest, as do over 300,000 people, in the further building of The Dalles Dam. So, I plead again to stop all appropriations, salvage what has been done, adjust with contractors what was to have been done, rebeautify Celilo Falls, and there will be peace between the Government and all of those who desire to continue to fish, commune, sell their fish, and live throughout the States of Oregon and Washington.

Build a dam at the junction of the Deschutes and the Columbia Rivers, and do not spend a billion or more to construct a canal, when atomic energy is at hand.

My pleadings for the Yakima Indian Tribal Council now rest, and I hereby place them in the hands of this subcommittee, wherein I shall pray that the Great Spirit or God will direct, each to decide as though he were, for a moment an Indian, and may God direct the mind and soul of our President of the United States, Mr. Dwight D. Eisenhower.

Gentlemen, please bear in mind, before you vote, the words of your Chief of the Department of the Interior—the Honorable Douglas McKay—at the conclusion of his excellent document, entitled: "Your Honor and the Indian," as follows:

"This entire problem is not with the Indians alone. The treaty that protects these Indians was made by the United States Government. Remember, the Government's word is your word, Mr. Citizen." Chief Rising Sun has spoken.

CHIEF RISING SUN, Ph. D., DD.
National High Priest of the A. I. S. Aid Council of America; International High Priest of the League of Nations, Pan-American Indians who live in South, Central, and North America.

APPROPRIATION REQUEST

Chief RISING SUN. Senator Knowland, may I ask what the appropriation is? How much have we come here to ask in regard to the next installment to further the building of the Dalles Dam?

Senator KNOWLAND. $37,420,000.

Chief RISING SUN. $37,420,000. Thank you very kindly.

I am only 80 years of age, born the 5th of November 1872. I am still a young man.

Gentlemen, Mr. Chairman, members of this subcommittee, distinguished guests, and our Army Corps of Engineers, ladies and gentlemen:

The matter is so simple, so simple. I have before me exhibit No. 12. I wish to publicly apologize to our President, the Department of the Interior, the Honorable Douglas McKay, for I held ideas, not knowing the truth of the matter, that it was he that said to a Senate committee that the Indians are now ready and have given their consent to going ahead with the building of the Dalles Dam.

It was Mr. Oscar Chapman that said that. I apologize. Get thee behind me, Satan.

TREATY CITED

First, there is a treaty between our Government and the Indians. Isaac Stevens on June 9, 1855, made a treaty with the Yakima Nation. How long? Not a few days; not a few weeks, but as long as the snow is on the slopes of Mount Everest, as long as the river runs, as long as the sun rises and sets, and the water flows.

Has the sun stopped rising a second? Has the river stopped flowing?

I plead here once and forever, they have no right to begin the dam, especially without giving notice to the Indians. Was there notice given to the Yakima Nation that you were going to start the dam? Yes, or no?

No, your honor, and you can make a note of that. In an agreement between two people the other party must be notified. That is very simple.

They went ahead. God bless them. God bless every one of them.

I say now, if I say not another word, you did it because you thought you were going to have a war with Russia. There will be no war with Russia. I knew that 10 years ago. They are wise. We put everything in the paper and give ourselves dead away.

Gentlemen, may I say again by way of reiterating that the water runs, the grass is green and the snow is on the slopes of Mt. Everest.

I have answered each one of these items and I wish to read this one. I wish to read what the former Governor of Oregon said:

We have not, nor have we ever been in accord or agreement with the Government's attempt to set aside our treaty. Our treaty is as important as the Constitution of the United States.

OPPOSITION TO PROJECT

Again, let me say: Is it fair and just to continue the building of the Dalles Dam while the Indians, who still hold to their treaty, are not in accord?

Why are they not in accord? Every year we commune with fish instead of the white man communing with the wafer, bread and water. It is our sacred right, a religious right and now our President, God bless him, known by the artists of the Columbia River, knew his parents and knew him. I say now can't we get the ear of our President and get him to give a command that all future work of construction on the Dalles Dam cease impending a thorough investigaiton of the situation by the Republican administration? That will relieve you of headaches.

You gentlemen are important. But we must go to the very top. This entire problem is not with the Indians alone. The treaty that protects these Indians was made by the United States Government.

Remember, the Government's word is your word, Mr. Citizen.

Now, I am going to plead for just a few minutes. Is our treaty a scrap of paper? We give our word and honor to these Indians. Shall we break it now? Because the Truman administration in some manner started the dam, should we break our word, or should they break theirs?

You just put about $100 million in there before it will be through. It would be all right if there was no other place to locate this dam.

I have been in Portland, Oreg. I came to be the top authority on the juvenile delinquency there. I have a right today.

I say is it right to break a treaty when they can place the dam at the junction of the Columbia River? It is not more dams that you need; it is more water that you need at the right time. Because water freezes, they have not been able to control it. That can be controlled. That is what I say, and I may be mistaken.

I might say that I was glad to read not long ago that various subcommittees are opened with a prayer. We need more spirituality. If I am jeopardizing my interests for a position that was offered me by the Government as Commissioner of Arts and Crafts, I have spoken the truth.

However, Jimmie James has written to the President that I be made a Commissioner of Indian Spiritual Welfare and Public Relations, another office where I could come in in truth before God and plead for the Government as well as I could plead for the Indians against the Government. That is honest and true.

So to you Indians, my brothers, pray, pray.

Turn this matter into God's hands and through this committee.

I bless you in the sign of the Cross as a national high priest of the American Indians of the United States and the League of Nations comprising over 2 million Indians.

Thank God in my organizations I am organizing all the Indians of the Western Hemisphere and Jimmie James has already started to organize the Northwest Indians Rites Council and the Middle State Indian Rites Council and the Eastern States Indian Rites Council.

Senator KNOWLAND. Thank you very much.

We have a letter from Senator Morse asking that another letter of a witness who is not able to be here be put in the record. That will be done.

(The material referred to follows:)

PORTLAND 15, OREG., *May 11, 1953.*

Hon. STYLES BRIDGES,
Senate Appropriations Committee,
Washington, D. C.

DEAR MR. CHAIRMAN: The construction of the Dalles Dam has already started, but as yet, none of the wild, rugged, beauty of Celilo Falls has been destroyed. It is the contention of the citizens of Portland that the construction of the dam has not progressed to a point where it would be unfeasible to relocate this dam at the site originally planned several miles above the falls on the Columbia near the mouth of the Deschutes River. It was with this in mind that the enclosed memorial was presented by State Senator Richard Neuberger in the present legislature. However, this memorial never reached the floor because the Senate Rules Committee would not grant permission for its presentation at this late date in the session. I would appreciate your reading the enclosed memorial.

For countless generations this golden mile at Celilo Falls contained the New York City of the Indians and the pre-Indians whose culture reached a peak in the Columbia Gorge between The Dalles and Celilo Falls. If New York City and the National Art Gallery were to be flooded out by an Indian Dam, the Manhattanites could not be any more disturbed than is the Yakima Indian Nation at the threatened inundation of Celilo Falls. At one time the Yakima Nation included more than half the State of Washington and the powerful treaty of 1855 was with the Yakimas. There were other treaties which came later with the other tribes of Indians. A few of the Indians live at Celilo the year around, but the majority come from tribal centers many miles away. Largest groups represented are the Yakimas from central Washington. Others are the Umatillas, Warm Springs, and Nez Perces from Oregon and Idaho.

These fishing Indians at Celilo present one of the West's most colorful scenes and attract thousands of tourists who come to watch. Of their annual catch of these salmon which attempt to climb the rapids and are caught, averaging 2,600,000 pounds according to Oregon State Fish Commission, the Indians sell four-fifths to fish buyers, canneries, and tourists, and they dry the other one-fifth for their own winter consumption.

Now with the construction of 14 dams on the Columbia River, the salmon industry and the world-famous Columbia River chinook salmon will be exterminated to a large extent because the fingerlings will be ground to pieces in the turbines at the dams on their way from the spawning grounds on the tributaries of the Columbia River to the Pacific Ocean. The salmon ascend the river now at Bonneville Dam fish ladders 50 miles east of Portland but the problem is in getting the fingerlings down the river when there is no water going over the spillway.

While in Washington, D. C., I met four of the Yakima chiefs who had come from their homes in Toppenish, Wash., to ride on the State of Washington float in the inaugural parade. They represented the 14 chiefs of the tribal council of the Yakima Nation. I am enclosing a leaflet written by my son F. Charles Jensen, which will explain the Indians viewpoint. They tried through their Congressman to see the President and I tried, too, so that they could go home to their people and tell them that they had seen the Great White Chief in whom they had so much confidence before election, and that he would give them justice and would do all in his power to uphold the honor of our country, a large part of which had been lost in the preceding administration.

I also appealed to Mr. McKay who saw the chiefs after I left Washington and was photographed with Chief Totus who is the medicine man for the tribe. This picture appeared in Life magazine. Mr. McKay feels that this matter is one which is now beyond the control of his Department. In this particular instance, The Dalles project, which is the responsibility of the Corps of Engineers and the Department of the Army rather than that of his Department was authorized, appropriations made, and work begun before this administration came into its position in Washington. I know that Mr. McKay, in the name of progress is in favor of covering over Celilo Falls with 40 feet of water by the resultant lake in back of the dam and feels that building the dam in its present location will be a great aid to river navigation. Since the building of Bonneville Dam 50 miles west of Celilo Falls, only 1 large ocean ship has gone through those locks to the

city of Hood River in the past 14 years. It is true that there is considerable barge and tugboat travel through the locks en route to ocean shipping to Portland from eastern Oregon, but there is a canal built around Celilo Falls in 1915 which takes care of this transportation around Celilo Falls.

When I went to see Senator Morse in January while in Washington, and discussed the situation with him, he asked me to give the facts to his legislative assistant, Mr. William Berg, so that he might prepare a brief on the situation. The next day during a discussion with a man who had befriended the Yakima chiefs in Washington, D. C., through the years by obtaining copies of reports and hearings for them, I was told some facts that I found hard to believe being an American citizen. So astounding were these facts, my informant told me, that Drew Pearson would expose the whole matter in his column. I could hardly believe what was being said, and when this man asked me to come to his office the next day to see the documented evidence, I did so, and then, with my own eyes, I saw what had been said and done.

This man gave me a duplicate set of these records and with Chief Wilson Charley and Chief Watson Totus and Paul Ewing of the Oregonian newspaper we went up on Capitol Hill and laid the whole matter before Mr. Berg, Senator Morse's assistant.

The next day, Mr. Morse took the records and the brief to the Interior Committee and after a lengthy discussion it was decided that Mr. Morse ask for a rehearing before the Appropriations Committee of the United States Senate. Senator Morse did this, and sent me here in Portland a copy of his letter to Senator Styles Bridges, chairman of the Senate Appropriations Committee. This letter was dated February 3, 1953. Senator Morse received a reply from Senator Bridges on February 16, which is as follows:

Hon. WAYNE MORSE, FEBRUARY 16, 1953.
United States Senate, Washington 25, D. C.

DEAR SENATOR MORSE: Thank you very much for your letter of February 3, 1953, concerning the interest of Mrs. Gertrude Jensen as chairman of the Save the Columbia Gorge Committee in protecting the Indian fishing rights at Celilo Falls. In that letter you also list the names of persons and organizations that would like to have an opportunity to present their views to the Appropriations Committee relative to the effect of the Dalles Dam on the Indian fishing rights at Celilo Falls.

It is the policy of the committee to afford interested parties an opportunity to present their views to the committee relative to appropriations under consideration. In accordance with this policy I shall be pleased to bring your letter to the attention of the Subcommittee on Army Civil Functions.

When a definite schedule of hearings has been established I will be pleased to inform you of the time the subcommittee will hear your witnesses.

Sincerely yours,

STYLES BRIDGES, *Chairman.*

The Dalles project was authorized by the Rivers and Harbors Act of May 18, 1950. Funds for the prosecution of the project were made available in the acts making appropriations for the civil functions of the Army for the fiscal years 1952 and 1953. Construction of the project has already been commenced by the Corps of Engineers of the Army which has supervision thereof under the terms of the applicable legislation, and it is said that it is too late now to halt this construction, or to select another site for the dam.

I wish to say that both in the appropriation bill on civil functions, Department of the Army for the fiscal year 1952 and 1953, the House Committee on Appropriations would not give further consideration to this project until the treaty matter was settled. The following is from page 3 of Union Calendar No. 151, Report No. 544 of the House of Representatives on civil functions, Department of the Army, appropriation bill, fiscal year 1952:

"The request of $18 million to initiate construction on the Dalles Dam, Oreg., is denied. This is a new project, authorized in Public Law 861 of the 81st Congress. To date no funds have been made available for the planning of this project. The committee does not feel that study of this project has sufficiently progressed for the Corps of Engineers to be able to definitely inform the Congress of the ultimate Federal costs.

"In a treaty negotiated between the United States and the Yakima Tribe of Indians on June 9, 1855, the Indians were granted certain fishing rights on the Columbia River. These rights will be completely destroyed in direct violation of the treaty if construction of the dam is approved. Aside from the moral and legal

treaty aspects, the present estimated cost of the Dalles Dam does not contemplate any payment to the Indians for their economic loss, estimated $900,000 annually. The committee will not give further consideration to this project until the treaty matter is settled to the satisfaction of all parties concerned and until proper and final cost estimates are determined."

(The Indians along the Columbia River whose property was covered by water by the resultant lake in the building of Bonneville Dam 14 years ago have not as yet received any compensation for their losses and claims.)

The Senate, however, that year, appropriated the money for construction of the dam. The Indians were not notified of the hearing of the Senate Appropriations Committee and this committee, believing there was no opposition, did not know the real and deep significance of Celilo Falls to the Indian nations.

The following year, the House again cut out funds, this time for 1953.

Then the Senate Appropriations Committee again took up the matter of funds for the Dalles Dam. This time the Indians appeared before the committee on or about May 21, 1952. At the conclusion of their testimony, one of the Senators stated that had he known the facts the year previous, he would probably have voted differently (from the record) regarding the appropriation.

Two days after the Yakima chiefs testified before this Senate Appropriations Committee and left the Capital for their homes, the former Secretary of the Interior, Oscar Chapman, testified before this same committee as follows:

"One thing that can limit the increased production in this country more than any other single factor is electric power. That one force alone can choke off and limit the productive capacity of this country more than any other one factor.

Unless we expand the base for power production in this country we will continue to pay the price. Here you have an opportunity to double your money in the value of both the flood-control features and the power development that are attached to these projects.

I cannot see why this program should not be construed as an economy move. You bring more taxes into the Treasury, legitimate taxes that people are willing and ready to pay when you give them this opportunity to do so. For instance, let us consider the Dalles project funds were appropriated to start work this year, but the House cut out funds for 1953. The House based its action on the failure to obtain an agreement on the Indian rights. I have been informed an agreement is now ready and that there is no opposition from the Indian group on this project. There is no reason to delay construction. It would delay us a whole year in the development of this project if funds are not provided in this bill. I mention this situation because The Dalles is one of the projects that is seriously needed in that area.

(The preceding statement from the Honorable Oscar Chapman is in the record of hearings before the Subcommittee on Appropriations of the United States Senate of the 82d Cong. on H. R. 7268, p. 1443. Making appropriations for civil functions administered by the Department of the Army for the fiscal year ending June 30, 1953.)

The Yakimas did not know of Mr. Chapman's remarks after they had testified for many months afterwards, and they want you to know that:

"We have not, nor have we ever been in agreement or accord with the Government's attempt to set aside our treaty. To us our treaty is as important as the Constitution of the United States."

Sincerely yours,

(Mrs.) GERTRUDE GLUTSCH JENSEN.

SENATE JOINT MEMORIAL No. —

To His Excellency, the Honorable President of the United States, to the Honorable the Vice President of the United States, to the Honorable the Secretary of the Interior of the United States, to the Honorable the Secretary of Defense of the United States, to the Honorable the President Pro Tempore of the United States Senate, to the Honorable the Speaker of the House of the United States House of Representatives, and to the Honorable Senators and Representatives of the Congress of the United States of America from Oregon:

We, your memorialists, the 47th Legislative Assembly of the State of Oregon, in legislative session assembled, most respectfully represent as follows:

Whereas the United States Government in 1855, through its military and civilian forces in the field in the Pacific Northwest region, entered into a solemn treaty with the Indian Tribes of the upper Columbia River to guarantee to those tribes perpetual fishing rights at Celilo Falls; and

Whereas this fishing site at Celilo Falls has provided many successive generations of Indians and their families with an important source of livelihood and employment; and

Whereas this particular spot on the Columbia River has attracted thousands of tourists from all over the United States, as well as from many other parts of the world; and

Whereas the tourist industry ranks behind only timber and agriculture in the general economy of the State of Oregon; and

Whereas Celilo Falls is the sole major waterfall on the great Columbia River, along that portion of the river which is contiguous to the State of Oregon; and

Whereas an inundation of Celilo Falls not only would deprive present and future Indians of a substantial portion of their income from salmon fishing, but would also eliminate an attraction to travelers along the Columbia River Highway: Now, therefore, be it

Resolved by the Senate of the State of Oregon, the House of Representatives jointly concurring therein, That, we urge the Congress of the United States to move with the utmost care, caution and diligence before enacting any legislation which would threaten to destroy the scenic, recreational, and economic value of Celilo Falls, and

That we further urge the Congress of the United States to take appropriate steps to perpetuate Celilo Falls in keeping with the solemn treaty obligation which our National Government has with the Indians who are the descendants of the original owners of the United States and of the Oregon country, and

That, copies of this memorial shall be sent to the President of the United States, to the Vice President of the United States, to the Honorable Douglas McKay, Secretary of the Interior, to the Honorable Charles E. Wilson, Secretary of Defense, to the President Pro Tempore of the United States Senate, to the Speaker of the House of the United States House of Representatives, and to all members of the Oregon Congressional Delegation in the Senate of the United States and in the House of Representatives of the United States.

YOUR HONOR AND THE INDIAN—GREAT WHITE FATHER

"THE TREATY WILL LAST AS LONG AS THE SNOWS ON THE SLOPES OF MOUNT ADAMS, AS LONG AS THE RIVER FLOWS, AS LONG AS THE SUN RISES AND SETS. IT IS THE WORD OF THE GREAT WHITE FATHER." Isaac I. Stevens, June 9, 1855.

On the 9th day of June, in the year one thousand eight hundred and fifty-five, Isaac I. Stevens, Governor and Superintendent of Indian Affairs, for the Territory of Washington on the part of the United States and representatives of various tribes, met at Walla Walla to conclude a treaty. This treaty gave the United States Government over half the area of what is known as Washington State. In return, the various tribes, known thereafter as the Yakima Nation, were given a reservation and the rights to fish, as had their forefathers, before them at Celilo Falls on the Columbia River.

THE PROBLEM TODAY

The construction of a dam at The Dalles, Oreg., has begun. The resulting lake caused by this dam will cover these falls with 40 feet of water making it impossible for the Indians protected by the treaty and other tribes protected by similar treaties, to fish at this traditional site as their forefathers. It is the contention of the United States Government that this treaty with the various Indian tribes will not be violated as the Government will pay the various tribes for their fishing rights.

THE REASON FOR THE DALLES DAM

"The overall development of the Columbia river is based on the economic welfare of the State, part of which is navigation. If this dam were moved up the river to spare Celilo Falls it would mean the entire rebuilding of the Celilo Canal which is obsolete. The additional cost of building the locks and canal could not be justified." * * * Douglas McKay, Governor of Oregon.

WHAT THE CELILO FALLS AREA MEANS TO THE INDIANS

The major controversy over the construction of The Dalles Dam has been the loss of Indian treaty rights. However, there are other aspects of this situation that bear investigating. What does this area mean to the Indians involved? Why are they opposed? Here is a brief résumé of how the Indians feel from a personal interview by F. Charles Jensen.

1. We took the treaty offered us by the United States in good faith and have abided by that treaty to the fulfillment of obligations imposed upon us by this treaty. Now, the Government wants to give us money for our treaty rights. It is money the Government hasn't appropriated, and we have no assurance that it will be. History has shown us that in the past, the Government hasn't considered our claims important enough to take immediate action.

Right now, the Government is just beginning to settle claims and money settlements that are over 50 years old.

2. The Celilo Falls and the area around it has been the fishing grounds of our fathers, their fathers, and their fathers before them. It has been our heritage. It is the center of our economic livelihood. God has sent the salmon up the river since the beginning of time. He gave us the means of catching these salmon for our food, and for our economic livelihood. We have been fishing at Celilo Falls longer than the white man has been on this continent.

3. The Celilo Falls area and the falls itself is the center of our religious heritage. Every year we hold a festival thanking the Great Spirit for the salmon, and each year He has sent the salmon back up the river. It is the natural cathedral that God provided for us.

4. The Celilo Falls area is the center of our social life. Our annual festival brings us together with the various other tribes located in Washington, Oregon, and Idaho. Before the white man came other tribes came from as far east as the Dakotas.

5. We realize that the Government tries to be fair with everyone, but they do not seem to realize or try to understand that we do not want money. Money doesn't mean anything. Money can be spent, but the salmon will continue to return to Celilo Falls, and God will feed us.

6. The Army engineers have been trying to negotiate with us to take money that they haven't got. They begin the construction of the dam. The appropriations for the dam last year were not appropriated by the House of Representatives because we were not in accord, but certain powerful men went to the Senate and got the money through the Senate. Is it fair to keep on building the dam when we are not in accord? Doesn't our treaty mean anything? Are we not entitled to a choice? But still the dam goes on.

Is it the way of democracy when we go to Washington and testify on our own behalf in front of the committees, and then after we have gone home the former Secretary of the Interior appears before the Appropriations Committee of the Senate and makes the following statement:

"I have been informed an agreement is now ready and that there is not opposition from the Indian group on this project" (the Dalles Dam).

NOTE.—This statement was made at a hearing before the subcommittee of the Committee on Appropriations of the United States Senate during the 2d session of the 82d Congress, by the Honorable Oscar L. Chapman, Secretary of the Interior (from the record).

When such testimony is taken into consideration by the members of the committee, and especially testimony made by such a high-ranking Government official, is it just that we are not notified?

We have not, nor have we ever been in agreement or accord with the Government's attempt to set aside our treaty. To us our treaty is as important as the Constitution of the United States.

SOME QUESTIONS TO BE ANSWERED

1. Can the Indians really be compensated for the loss of their treaty rights and the inundation of the last remaining natural center of their social, economic, and religious heritage?

2. Is it our way of government to give a minority group who initially held vast areas of land, but ceded most of it to the United States in return for certain rights, no choice in a matter that so deeply concerns them?

3. Is our sacred word and treaty only a scrap of paper that after 98 years can just be set aside at the whim of our legislators on the basis of untrue testimonial by misinformed high officials in our Government?

4. Is it fair and just to continue the building of the Dalles Dam while the Indians, who still hold to their treaty, are not in accord?

This entire problem is not with the Indians alone. The treaty that protects these Indians was made by the United States Government. Rember, the Government's word is your word, Mr. Citizen.

What you can do as a citizen: Write to your Congressman. Give him your opinion and your reasons. Letters may be addressed as follows: Senator's name and State, Senate Office Building, Washington, D. C.; Representative's name and State, House Office Building, Washington, D. C.

For further information phone F. Charles Jensen, East 4652 or Jimmie James, Garfield 7776.

Senator KNOWLAND. The committee has received a petition from the Rock Creek Indian Tribe of Klickitat County, Wash. That petition will be placed in the record at this point.

(The petition referred to is as follows:)

PETITION

MARCH 18, 1953.

To the Appropriations Committee of the United States Senate, Washington, D. C.:

We, the undersigned chief, subchiefs, and members of the Rock Creek Indian Tribe of Klickitat County, Wash., respectfully petition your honorable committee to withhold further appropriations for construction work on the Dalles Dam, now in its initial stages of construction by the Corps of Engineers, United States Army.

Our tribe, known in ancient days as the Kah-milt-pah Tribe, is a member of the Yakima Indian Nation, and was among those tribes mentioned in the Stevens Treaty of 1855 to whom perpetual fishing rights were guaranteed at Celilo Falls and other "ancient and accustomed" fishing grounds. Those fishing grounds will be inundated and destroyed forever if the Dalles Dam is completed, and the United States Government will again have broken its faith with our people.

We respectfully direct your attention to resolutions and letters previously addressed to your committee, in which we pointed out that our tribe is not interested in money damages as a substitute for our fishing rights.

We therefore ask once again that the United States Government adhere to and keep inviolate the Stevens Treaty of 1855, which was entered into in good faith by the signatory tribes. We ask that work be immediately ceased on the Dalles Dam, and that further appropriations therefor be denied.

Respectfully yours,

Rock Creek Indian Tribe: By William (his thumbmark) Yallup, Chief; Oscar Billy, subchief; Charlie (his thumbmark) Canapo, subchief; John Barney, subchief; Lucy Billy, Secretary; Willie J. (his thumbmark) Culpus, Annie B. Culpus, Gus (his thumbmark) George, Victor George, Levi George, Sam Billy, Mitchell Billy, Leo Billy, Jason Billy, Lawrence Billy, Lucinda Billy, Thompson Colwash, Elsie (her thumbmark) Gibson, Anderson Jackson, Phillip Colwash, Anthony Colwash, Tommy Colwash, Joan Colwash, Bernadine Colwash, Linda Colwash, Francis Thomas, Wilkins Looney, Wilkins Looney, Jr., Sam S. Houetopot, Elsie B. Houetopot, Matilda S. Houetopot, Joyce Houetopot, Freddie Ike, Esther Canapo, Verna George, Virginia Canapo, Sallyann Canapo, James Canapo, Carl Williams, Josephine Barney Lena (her thumbmark) Barney, Minnie (her thumbmark) Johnson, Christine Barney, Edna Barney, Susie B. (her thumbmark) Walsey, Casey Barney, Delores Barney, Earl Barney, Shirley Barney, Arnold Barney, Minnie Barney, Amilia Richard, members of tribe.

Senator KNOWLAND. The committee has also received a letter and petition from the Celilo Tribe of Indians. That petition will be placed in the record at this point.

(The letter and petition referred to are as follows:)

THE DALLES, OREG.

Re Protest Against Further Appropriations for the Building of the Dalles Dam

ARMY CIVIL FUNCTIONS SUBCOMMITTEE OF THE
UNITED STATES SENATE APPROPRIATIONS COMMITTEE,
Washington, D. C.

DEAR SIRS: This will serve as notice to you that a committee from the Celilo Tribe of Indians, known as the Wy-em Tribe, living at Celilo Falls, Oreg., where the Dalles Dam is being built, will appear before your committee on Monday, May 18, at your convenience for such hearing, to protest any further appropriations for the building of the Dalles Dam.

Very sincerely,

HENRY THOMPSON,
WILLIE JOHN,
Members of Committee.

PETITION

To The Honorable United States Senate, Washington, D. C.

We, the undersigned chief, subchiefs, and council members of the Wy-em Indian Tribe of Oregon, respectfully petition that your honorable body disapprove any further appropriation for the construction of the Dalles Dam now being constructed on the Columbia River.

Our tribe has for centuries made its home on the banks of the Columbia River, close by the Celilo Falls. Our ancestors were among those who signed the Stevens Treaty in 1855, in which we were guaranteed the perpetual right of fishing at Celilo Falls and other ancient and accustomed fishing grounds. The rights guaranteed us under the treaty are now threatened by the construction of the Dalles Dam, which will inundate and destroy the fishing grounds. We, as well as the other tribes who signed the Stevens Treaty in 1855, have abided by the treaty, and have respected its terms. We believe the United States Government should do likewise.

We do not feel that money damages can adequately compensate us or those of our people who will follow us in the years to come. We feel that only by immediately halting construction of the dam can the United States Government show its good faith, thereby reserving to us our treaty rights.

We respectfully request your earnest consideration of this petition.

WY-EM INDIAN TRIBE
By Chief TOMMY (his thumbmark) THOMPSON, *Chief.*
HENRY (his thumbmark) THOMPSON, *Subchief.*
CHARLIE DUETTICKRON, *Subchief.*
JIMMIE (his thumbmark) GROTT, *Subchief.*
HOWARD JIM, *Council Member.*
WILLIE JOHN CULPIRS, *Council Member.*

Senator KNOWLAND. The next witness is Mr. Clifford Erdahl, Pacific Northwest Utilities Conference Committee.

PACIFIC NORTHWEST UTILITIES CONFERENCE COMMITTEE

STATEMENT OF C. A. ERDAHL, CHAIRMAN

NORTHWEST POWER POOL

Mr. ERDHL. I am here as chairman of the Northwest Pacific Utilities Conference Committee and here in our group is represented all of these various public and private agencies that constitute the western group of the Northwest power pool. They are here representing the Mountain States Power Co., the Washington Water Power Co., Pacific Power & Light Co., the Portland General Electric Co., Puget Sound Power & Light Co., the Northwest Public Power Association, the Washington State Public Utilities District Association, Seattle City Light, Tacoma City Light, and the American Public Power Association.

I would like to present the case of this group to you gentlemen, and then I would like to ask for just an introduction and possibly a very brief statement from these gentlemen, and in some cases, just an opportunity for them to present their prepared statements to the committee.

Senator KNOWLAND Yes. If the witnesses will keep in mind that we are running considerably behind schedule, that may be done.

Mr. ERDAHL. In talking to them I have pointed that out.

We who appear before you here today are members of the Pacific Northwest Utilities Conference Committee, and are representative of all the electric power agencies of the Pacific Northwest region comprising all of the State of Washington, much of Oregon, and northern Idaho.

Our organization is made up of those principal utilities, both publicly and privately owned, who joined together on a voluntary basis to operate what is known as the western Group of the Northwest power pool.

PURPOSE OF APPEARANCE

Our purpose in appearing before you today is to express our support of and to invite the United States Congress to likewise support and grant the request of the United States Corps of Engineers for appropriations adequate to insure:

1. The completion at the earliest possible date of the following hydroelectric projects now under construction in the Pacific Northwest, namely, McNary lock and dam on the Columbia River between Washington and Oregon; Chief Joseph Dam on the Columbia in Washington; the Dalles Dam on the Columbia River between Washington and Oregon; Albeni Falls Dam, Pene Oreille River in Idaho; Detroit Reservoir, North Santiam River in Oregon; Big Cliff, North Sanitam River in Oregon; Lookout Point Reservoir, Willamette River in Oregon.

2. That planning and construction to be initiated of such projects as will provide, at the earliest possible date, sizable amounts of upstream storage on the Columbia River system, such as Glacier View and Libby, in order that existing and contemplated downstream generating facilities may be utilized to their full capacity.

3. Plans and construction of other major Federal power generating projects on the main stem of the Columbia River must be initiated during the coming fiscal year—to provide a continuing source of power supply of not less than 500,000 kilowatts annually—if the normal load growth of the area is to be met.

JUSTIFICATION OF REQUEST

In justification of our support to the foregoing, we invite attention to the underlying problems confronting the people and utilities of the Pacific Northwest with respect to the commercial and industrial development of that area.

During the past winter months, November through January, all of our area suffered from a power shortage so real and so severe as to result in substantial unemployment and loss of production for essential civilian and defense needs.

Unless steps are taken to implement the power supply of the region, the people of our communities have no recourse but to expect a repetition year after year of a power shortage whenever water becomes a little short.

The utilities conference committee representatives have appeared before committees of Congress almost every year since the close of World War II, and have prepared numerous studies of the changing conditions of power supply and load.

Since 1950 conditions have become so much more acute and so many more Federal agencies have been concerned with the situation that our statements have been substantiated and reinforced by the estimates of the Defense Electric Power Administration and the Federal Power Commission, supported by conclusions of the Defense Production Administration.

REQUESTED 10-YEAR STUDY

Recently the Defense Electric Power Administration requested studies made by our utilities to be extended to cover a 10-year future period.

I brought along a real study which was made by our loads and resources subcommittee. It gives a factual report on the whole area with which we are concerned. I think the computations that we used of 5 percent for load growth are much too conservative because our normal load growth in the area without the new defense industries coming into the picture, are more like 7 or 8 percent.

SUMMARY OF STUDIES

These studies have recently been summarized in a report about to be submitted to the Federal Power Commission. This report shows the relation annually of the estimated power resources to the estimated loads of the region.

For the sake of brevity, a summary of that report is set forth in the following table.

(The table referred to follows:)

Annual surplus in 1,000 kilowatts

Year	If median water prevails		If adverse water prevails	
	Peak	Energy	Peak	Energy
1953–54	100	83	−414	−419
1954–55	−27	12	−609	−450
1955–56	194	283	−338	−282
1956–57	401	316	−231	−236
1957–58	646	495	−191	−127
1958–59	867	660	−72	−30
1959–60	826	636	−317	−188
1960–61	486	396	−670	−435
1961–62	129	143	−1,040	−690
1962–63	−242	−117	−1,418	−953

NOTE.—1. Negative data indicates deficiency. 2. Peak surplus indicated is for January of each operating year.

GROWTH IN POWER DEMAND

That takes into consideration non-Federal projects not cleared by the courts. This is the optimum we could expect.

The loads of the Pacific Northwest region ever since the close of World War II have grown at the rate of more than 10 percent per year. Regardless of this extremely rapid growth the engineers in preparing the study for DEPA have sought to make this study realistic and extremely conservative, and, therefore, estimated loads to show a growth of less than 5 percent per year for the period 1955-63.

In spite of the fact that such estimates of load growth are extremely conservative, the area can expect a large power deficiency whenever anything less favorable than nominally average water conditions occur.

It may be emphasized that these estimates are based on total load of the area and maximum utilization of every possible resource, including interchange with other areas.

The estimates of power generating resources are based only on those power projects generating facilities which are actually under construction or for which firm commitments have been made.

The Cowlitz River development of the city of Tacoma has been included as a resource, if clearance for its construction is not obtained, the deficiency shown will be increased accordingly.

It might be assumed that the load could be carried every year in which water conditions meet normal expectations, but to follow this course involves the acceptance of a policy of operating under a calculated risk which was adopted in 1951, and which proved so disastrous to the region in 1952.

POWER CURTAILMENT

Because the conditions of this past season requiring curtailment of power use proved so disastrous for the area, in turn affecting national welfare, it is unthinkable that continued recurrences of this situation could be accepted as a healthy prospect for either the local area or the country as a whole.

It is because of these things that we have no hesitation in appearing before this committee as we have to ask for the full amounts of money necessary to carry forward the present program and for careful consideration of the need for appropriations to insure the continuous development of additional power generating capability for the Pacific Northwest.

PREVIOUS INVESTMENT

Large sums of money have already been invested by the Federal Government in the power generating facilities on the Columbia River in the Pacific Northwest. The cheapest way in which to improve the present situation would be to construct upstream storage reservoirs from which water may be released to permit operation of downstream plants more nearly at full capacity, particularly when streamflows otherwise would be low.

The construction of an upstream storage development in itself will involve the installation of some generating capacity at the site of the project, but the much larger contribution is made by maintaining streamflows at downstream plants.

PROBLEM OF WATER STORAGE

Use of any particular site for the storage of water inevitably raises objections because of damages that may be imposed on the property of some interests, yet the longer the construction of a reservoir is deferred, the greater the damages that will be sustained.

It is in the interest of constructing storage reservoirs with the minimum of disturbance to others that we urge that funds be appropriated for planning and early construction of reservoirs.

A realistic appraisal of the load growth in our area indicates that in the not too distant future the loads of the public agencies may well require the full output of the existing Federal plants.

In such event the Federal Government will find itself with no recourse but the renegotiation of industrial contracts should the construction of additional power-generating facilities be limited by the lack of appropriations.

In fairness to our area and in the interest of national defense, we sincerely hope that such will not be the case.

The non-Federal utilities of the Pacific Northwest are diligently doing all in their power to provide for the increasing power needs of their respective customers and for the Northwest power pool.

SUPPORT SOLICITED

We, therefore, respectfully solicit your continued support and urge that appropriations for the Army civil functions be made in amounts adequate to insure the completion of the power program as we have described.

A. W. Trimble, president, Mountain States Power Co.

Owen Hurd, president, Northwest Public Power Association.

Paul B. McKee, president, Pacific Power & Light Co.

James H. Polhemus, president, Portland General Electric Co.

L. E. Karrer, executive vice president, Puget Sound Power & Light Co.

E. R. Hoffman, superintendent, Seattle City Light.

J. Frank Ward, superintendent, Tacoma City Light.

Ken Billington, executive secretary, Washington State PUD Association.

K. M. Robinson, president, Washington Water Power Co.

Senator CASE. The witness referred to private and public groups as being associated in the Northwest power pool. At the conclusion of his statement he has the names of these different companies listed. Some of them are self-evident.

IDENTITY OF COMPANIES

I wonder if he would identify for us which of those companies listed at the end are public and which are private.

Mr. ERDAHL. Mountain States Power Co. is a private power company. The Northwest Public Power Association is an association of all public agencies.

Senator CASE. Does that include the Rural Electrification Administration?

Mr. ERDAHL. There are about 46 REA's.

Pacific Power & Light Co. is a private company.

Puget Sound Power & Light Co. is a private company.

Seattle City Light is the second largest municipal utility in the United States.

Tacoma City Light is a municipal utility.

Washington State PUD Association is the public utility districts in our area.

And the Washington Water Power Co. is a private company.

The American Public Power Association is here to substantiate and back our statement and is a national association of all public power groups.

GOVERNMENT RECOURSE

Senator CASE. Then I should like to ask one question based on a sentence on page 6, where you state:

> In such event the Federal Government will find itself with no recourse but the renegotiation of industrial contracts should the construction of additional power-generating facilities be limited by the lack of appropriations.

Why do you say the Government would have no recourse?

Mr. ERDAHL. I can only assume that the Federal Government would see that the power first to be used from Federal projects would go to the maximum number of people, whether served by public agencies, or private agencies. That assumption on our part may not be correct, but the Bonneville Act indicates the power should go to the maximum number of consumers, rural and urban.

Senator CASE. Do you mean that the Government would have to make these contracts because the basic law or the basic contract provides for taking care of Government agencies first?

GOVERNMENTAL CONTRACTUAL OBLIGATIONS

Mr. ERDAHL. No. The statement means unless additional power plants are put in by the Federal Government, the Federal Government will not be able to back up the contracts already signed in the area.

With large industry they have 10- and 20-year contracts. With the utilities we have long-term requirements contracts.

Unless the Federal Government comes along with more powerplants, they will not be able to keep those contractual obligations.

Senator CASE. Has the Government guaranteed to provide a certain amount of power?

Mr. ERDAHL. Under the terms of their contracts, that is right.

Senator CASE. Those are firm contracts?

Mr. ERDAHL. To the extent that the contracts are written, that is the only part I can refer to, yes.

I am not talking about the "interruptible contracts." That is part of the industrial contracts. I am talking about firm power contracts.

Senator CASE. That the Government has agreed to make available certain quantities of firm power?

Mr. ERDAHL. That is right.

ADVOCACY OF GROUP

Senator DWORSHAK. Does your western group advocate power generation and expanded programs to meet the needs in the Northwest by the private utilities as well as the Government?

Mr. ERDAHL. We stand for the Federal Government either living up to their utility obligations or at least in fairness to give us some change so that we will know where we stand as far as our future is concerned.

Senator DWORSHAK. I do not think my question is clear enough. I mean under this cooperative plan, do you expect and urge the private utilities to expand their generating facilities as well as the Government?

Mr. ERDAHL. Yes. The private utilities, the public utilities and the Federal Government.

Senator DWORSHAK. Non Federal as well as Federal. You do not expect the Federal Government to assume the responsibility for generating all the power to meet the needs of the entire Northwest?

Mr. ERDAHL. By all means, no. Thank you very much.

Senator DWORSHAK. You know there has been some misinformation in the press frequently and at times there have been ardent advocates of the policy that the Federal Government should assume full responsibility for generating all the power to meet all the needs in the Northwest. You don't agree with that?

Mr. ERDAHL. No, sir.

POWER RESPONSIBILITY

Senator DWORSHAK. You think it is the responsibility of private utilities to maintain their efforts through this cooperative plan to provide essential power in the Northwest?

Mr. ERDAHL. We think it is the responsibility of non-Federal as well as Federal

Senator DWORSHAK. You draw no distinction between the two. You think there is room for cooperation and both groups should generate as much as they can to meet the potential demand?

Mr. ERDAHL. Yes.

Senator CASE. I seriously question whether any representative of the Government has the power to bind the Government to deliver beyond any circumstance firm amounts of power for industrial uses. I do not want to take up time here now, but I should like to have the witness submit for the committee a copy of such a contract.

Mr. ERDAHL. I might explain it very briefly. I am not a person that is in a position to present that to you.

I will do my best to obtain them, however.

Our domestic use in the area keeps going up year by year. That is the reason for it.

Senator CASE. The Government might sell the power if it is available, but I question very much whether any officer of the Government has any authority to meet the contract which would be actionable by private industry as against the Government in case the Government failed to make all the power available that you indicate may be asked for.

Mr. ERDAHL. I suppose that is true. I imagine if they do not have the power to sell, it would be hard to deliver.

But the terms of the contracts that are written by the Federal Government—unless new projects are brought into the area, the Federal Government will not be able to live up to their contractual obligations.

Senator CASE. You mean that some representatives of the Government have overcontracted the capacity of Government plants?

Mr. ERDAHL. On the basis that new projects would be coming in.

Senator CASE. That subject would be worthy of some investigation if that is true. I wish a copy of the contract might be made available.

Senator KNOWLAND. Probably we could get the information from the Government agencies who do the contracting rather than from the witness.

Senator CORDON. The witness would not have custody of a contract between the Government and private industry.

However, the Secretary of the Interior can furnish it.

Mr. ERDAHL. I want it made very clear that statement was not made to criticize any governmental agencies. It was made for the purpose of outlining the seriousness of the problem.

Some of the industries were brought out there in the interest of national defense.

Senator KNOWLAND. It is also possible that at the time contracts were intered into there was sufficient power, but with the tremendous population growth which has taken place up there and the other demands for power that what might have seemed to be a surplus or at least an adequate amount of power to meet the then commitments, because of the growth of the Pacific Northwest it has not turned out to be inadequate.

Mr. ERDAHL. That is correct.

After World War II there was a question whether the Federal Government would ever be able to sell all the surplus power they had in the area.

We have grown so rapidly and there has been a delay in all of these projects year after year, so that we have not been able to keep up with any schedule that the Federal Government made in which they attempted, from time to time, to keep up. They have not been able to do it.

SUGGESTED SUMMARY

Senator CORDON. Is it a fair statement to say that the meat of your statement is that the Government has outstanding contracts for the delivery of power for three types of parties:

One, industrial concerns where the contract is directly with the industrial concern, chiefly aluminum processing.

Two, with public agencies that are non-Federal in character.

Three, with private distributing agencies in the area.

Also that the contracts were made over a period of years and without advance notice of the growth of the area, either in population or industrialwise; that the plan of construction of the projects has not been kept up to the extent it could have been kept up from an engineering standpoint, due to the fact that in that area, as in all others, the matter of funds necessarily has been one that Congress had to determine throughout the United States, and the obligation you

mentioned is not mentioned as a legal obligation of the United States, but as to a necessity in the region.

And if a government chooses to do nothing, then the people can suffer; that as to the construction of the major hydroelectric projects, due to the fact they are multiple-purpose projects, under existing law at least it is not possible for private industry to engage in this construction.

Is that substantially correct?

Mr. ERDAHL. Some of these multiple-purpose projects on the main stem do present that problem, Senator. However, we feel that we should bring this case before you gentlemen. If the Congress, in its best judgment, determines that it can no longer maintain that level, whatever it may be, in all fairness to the people in our area we think we should be informed, and we will, I assure you, do the best possible job of doing for ourselves what up to this point at least has been partly a partnership responsibility of the Federal Government.

ADDITIONAL LEGISLATION

Senator CORDON. In which event you may have to ask Congress for additional legislation that will permit you to do that.

Mr. ERDAHL. In some cases it will call for legislation on the part of the Congress, where they might have authorized some projects that might possibly be built by non-Federal agencies, if that be the wish of the Congress to so do.

Senator CORDON. All right.

Mr. ERDAHL. I have a statement, aside from the individuals that I mentioned, or a wire, that I think was sent to this committee by the Eugene Water and Electric Board of Oregon.

I was wondering if that could be put into the record.

Senator CORDON. I ask, Mr. Chairman, that that wire, a copy of which I have here, be placed in the record following Mr. Erdahl's statement.

Senator KNOWLAND. It will be made part of the record.

(The telegram referred to follows.)

EUGENE, OREG., *May 14, 1953.*

Senator GUY CORDON,
Senate Office Building, Washington, D. C.:

The Eugene Water and Electric Board although not a member of the Northwest Utilities Conference Committee, is in general agreement with its statement as presented by its chairman, C. A. Erdahl, of Tacoma City Light, to the Army Civil Function Subcommittee of the Committee on Appropriations.

The board also emphatically agrees with the announced policies of the administration to the effect that non-Federal agencies and organizations should make such expansions of their generating facilities as are economic, on their own initiative, including constructions on the Columbia River. Cases in point include the constructions proposed by the City of Tacoma on the Cowlitz River, the Portland General Electric Co. on the Deschutes River, Grant County PUD at Priest Rapids on the Columbia River, and the Eugene Water and Electric Board on the McKenzie River, and others.

Discussions with governmental agencies regarding the McKenzie development in our opinion indicate an unrealistic basis for their objections. The Eugene Water and Electric Board further urges that Congress enact legislation which will permit the joint development by Federal and non-Federal agencies of multipurpose dams. The board would like very much to have the right to consider the financing, installation, and operation of power facilities to be included in the proposed Cougar Creek development on the South Fork of the McKenzie River. The Eugene Water and Electric Board is a municipal utility which

owns and operates two hydroplants on the McKenzie River which have a combined generating capacity of 21,500 kilowatts and a steam plant with a generation capacity of 30,000 kilowatts. We purchase substantial amounts of power from the Bonneville Power Administration but are not wholly dependent on them.

EUGENE WATER AND ELECTRIC BOARD.

Mr. ERDAHL. In some cases these gentlemen have statements they might want to put into the record, in other cases, they may have a brief statement, and in other cases they may not have anything, but I would like to call upon them to give them an opportunity to tell you that they agree with this statement, and, secondly, if in connection with these questions, they differ at all, I want them to tell you how they feel about it, so that I won't get myself out of character.

Mr. A. H. Wegner of the Washington Water Power Co.

WASHINGTON WATER POWER CO., SPOKANE, WASH.

STATEMENT OF A. H. WEGNER, REPRESENTATIVE

PREPARED STATEMENT

Mr. WEGNER. Mr. Chairman, I have a prepared statement which I would be happy to submit for the record.

Senator KNOWLAND. That may be printed in the record in full.

Thank you very much.

(The statement referred to follows:)

STATEMENT OF A. H. WEGNER OF THE WASHINGTON WATER POWER CO., IN SUPPORT OF APPROPRIATIONS FOR ARMY CIVIL FUNCTIONS

My name is A. H. Wegner. I am employed by the Washington Water Power Co., Spokane, Wash., and am a representative of that company on the Pacific Northwest Utilities Conference Committee. The company has been associated with the conference committee from its earliest beginning and is an active participant in the Northwest power pool.

The Washington Water Power Co. joins its associates of the conference committee in inviting your attention to the continuing need for additional power generation in the Pacific Northwest as reflected in studies made for and supplied to the Federal Power Commission and the Defense Electric Power Administration. We believe tnat special emphasis and attention should be directed to the increasing need for an adequate amount of storage reservoir capacity on the upper reaches on the main stem of the Columbia River to provide more firm power to the area during the winter high load season.

For its part, the Washington Water Power Co. is endeavoring to increase the production capacity of the area. Currently, the company is completing the construction of a hydroelectric project at Cabinet Gorge on the Clark Fork River in northern Idaho with a capability of 230,000 kilowatts. The first 2 units were brought into operation in the late months of 1952 and thereby helped to reduce, by more than 100,000 kilowatts, the severity of the power shortage then occurring. With the last of the 4 generator units coming into production about July 1953, the project and related transmission facilities are expected to cost about $46 million.

To further increase its power supply, the company is presently conducting engineering investigations of another hydro site, Noxon Rapids, on the same river but in western Montana and should engineering and financial arrangements be found feasible we plan to proceed with its construction. Such installation is tentatively estimated to cost in excess of $80 million for the plant and related transmission facilities and have a power capability of around 360,000 kilowatts.

In addition to planning for a power project at Noxon Rapids the company is also investigating the possibility of adding to the power supply of the region by importing a block of power and energy from a neighboring electric utility, to the north of Spokane, in Canada. Such import of power as may be possible must be made with due regard to national and international requirements and it is not possible at this date to consider this more than a possibility.

The Washington Water Power Co. is one of the non-Federal utilities referred to by Mr. Erdahl in the statement of the conference committee. My purpose in outlining the work that the company is doing to implement power supply is to invite attention to the fact that as an investor-owned taxpaying utility, the company is conscious of a utility responsibility to its customers and to the area. As with other utilities of the region, the company is diligently doing what it can to increase the power resources thereof.

Mr. ERDAHL. And Mr. Don McLung of the Pacific Power & Light Co.

THE PACIFIC POWER & LIGHT CO.

STATEMENT OF DON McLUNG, REPRESENTATIVE

CONTINUATION OF PROJECTS URGED

Mr. MCLUNG. Mr. Chairman, I have no prepared statement. I would like to make a few brief comments. I am sure I need not tell the committee that the Federal Government in the past 20 years has taken a predominant position in the supply of electric power in the region which we represent.

Now, with that position existing currently, I don't see how it is possible for the Federal Government to suddenly drop out of the picture, because it would create a disastrous situation in the Northwest.

What we plead for certainly as No. 1 is the appropriation of the funds necessary to continue projects now under construction on schedule. Without that, as Mr. Erdahl's testimony shows, the region will be very short.

Now, if there is to be a transition from Federal ownership to local ownership, or a combination of Federal and local ownership, it cannot be accomplished overnight.

We are prepared to do our part. When I say "we," I mean my own company, and I am sure the other utilities will take the same position. Nevertheless, some time will be consumed in the transition.

CONTRACT REQUIREMENTS

I would like to clear up one point that was mentioned earlier by Mr. Erdahl. As far as contract requirements are concerned, the publicly owned private utilities have no such types of contracts. In fact, we have contracts, but for very little power, because it has not been available for us.

That is all, gentlemen. Thank you.

Senator DWORSHAK. One question. Your company is willing to do its part in expanding generating facilities to meet the increased demand for power in the Northwest. Is that right?

Mr. MCLUNG. Very definitely, Senator. We have one plant of 108,000 kilowatts nearing completion, and we are willing to jump in in the middle of the picture.

Senator DWORSHAK. I thought you were representing the Washington Water Power Co.

Mr. MCLUNG. No; my name is D. R. McLung of Pacific Power & Light.

Senator KNOWLAND. Thank you.

Mr. ERDAHL. Next is the representative of the Portland General Electric Co., Mr. Frank Warren.

PORTLAND GENERAL ELECTRIC COMPANY

STATEMENT OF FRANK M. WARREN, JR., EXECUTIVE VICE PRESIDENT

PREPARED STATEMENT

Mr. WARREN. Mr. Chairman, I have a prepared statement for the record, for inclusion in the record.

Senator KNOWLAND. It may be included in full.

(The statement referred to follows:)

STATEMENT BY FRANK M. WARREN, JR., EXECUTIVE VICE PRESIDENT, PORTLAND GENERAL ELECTRIC CO.

At this hearing a number of witnesses from the Pacific Northwest are endeavoring to bring members of the committee up to date as regards our estimate of the electric power supply situation in the region over the next 10-year period. These witnesses, as has been the case in many previous appearances before this and other committees of both Houses, represent the non-Federal electric-utility systems which serve the greater portions of both the States of Oregon and Washington and all of which are dependent upon federally produced supplies of electric power, in greater or less degree, for properly serving their customers.

These non-Federal systems, as you are aware, have associated themselves in the Pacific Northwest Utilities Conference Committee for the purpose of determining areas of agreement between the individual system managements upon power policy questions affecting the region as a whole, and at the same time, of providing a medium through which the agreements thus reached can be expressed with the added forcefulness and emphasis which unity can supply upon such occasions as this one.

In submitting this statement for the record, Portland General Electric Co. desires primarily to assure the Members conducting this hearing that agreement does exist between the views of our management and those expressed by Mr. C. A. Erdahl, chairman of the conference committee, and by other witnesses who have stated the serious need not only for holding the Federal power-producing projects now under construction on the Columbia River on schedule, but also for appropriating sufficient funds to enable starting construction of at least one new project among those which have been authorized by the Congress for multipurpose development of the stream.

The need is a particularly pressing one for the customers served by Portland General Electric Co. because we have purchased a very large portion of our requirements from Federal sources of generation since the inception of the Bonneville project. The area served by Portland General Electric Co. covers 2,300 square miles in the most heavily populated and commercially developed portion of Oregon, a section of the lower Willamette Valley in which approximately half of the entire State's population resides. It is a growing area and its need for new power supply is approximately 40,000 kilowatts of capacity annually. Additions to our own system generating capacity and the amounts made available to us on a firm basis from the Federal system have not been sufficient to keep pace with this need. Our 216,000 customers, of which 87 percent fall in the residential and farm classification, presently are more keenly and painfully aware of this condition than at any previous time. The service curtailments, brought about by the regional power deficiency of the last year, and the discriminatory and continuing burden of abnormal cost placed upon our customers by the effect of Federal power marketing policies, requiring consumers served over lines of private utility companies alone to bear the full expense of operating steam-electric plants during the deficiency period, are fresh in mind. There exists a wide public dissatisfaction with the condition that has occurred and a real anxiety for some corrections to take place.

The corrections needed are of several varieties. Some involve the broad, overall question of future national power policy—a clearer definition of the ultimate intent and extent of Federal activity in the construction and operation of power projects. Some involve the contractual resolution of differences which have existed between distributors such as ourselves and the Federal power marketing agency in the Columbia Basin region relative to obtaining for the con-

sumers we serve what they and we both regard is a proper entitlement to benefits from projects for which they, by taxation, have provided capital. The needed corrections of this type are receiving attention by the Congress, by the executive departments concerned and, certainly, by ourselves. In the field of contract negotiation particularly we presently feel that some real progress is being made, and it is very heartening indeed.

However, corrections of the type mentioned cannot achieve a complete solution of the bad power-supply condition the region is in and, as a practical matter, some of them will take considerable time to work out. The obviously direct solution is the construction of added generating facilities by someone.

Portland General Electric Co. is well aware of the tremendous pressure applied upon this Congress and all executive departments of the Federal Government to balance the budget and to reduce the level of Federal expenditures. Certainly we would be the last to quarrel with such a necessary objective and, accordingly, feel that some explanation is in order for our coming here at this particular time with a request for very substantial appropriations. Possibly, if we did not do so, we could be criticized for such a request by those who may feel that the local electric systems have not shown sufficient initiative of their own in providing the physical facilities necessary to supply the Pacific Northwest with an abundance of power.

However, it is not purely a question of our initiative. The present situation of dependence upon Federal sources of supply has come about, as has the deficiency in supply, largely as the inevitable result of economic forces brought into play by the entrance of the Federal Government into the power business of our region in a major way and also in a way that excluded local systems from making large additions to their own generating capacity. The various factors of subsidy associated with power produced at multipurpose projects undertaken by the Federal Government have—for the investor-owned systems if for no others—converted many formerly economic power sites susceptible for development by them into high-cost sites in comparison with the subsidized cost of power from Federal sources. It has seemed to be only commonsense for us to endeavor to supply our customers from the cheapest sources of power available—and they have been Federal Government sources for the last 15 years.

Recently many of the local, non-Federal systems have undertaken the construction of important hydroelectric projects, stimulated in some degree by the desperate deficiency situation confronting us and in some degree by the help offered through defense necessity certification and the privilege of accelerating amortization of costs for Federal income tax purposes. Portland General Electric Co. completed a 5,000-kilowatt addition to its River Mill Dam last year, is completing a modernization of its Willamette Falls generating station this spring that adds more than 10,000 kilowatts to our own system resources, and has just let contracts for constructing the first of a two-phase expansion of its Oak Grove project which will, when finished this fall, provide another 15,000 kilowatts of peaking capacity. These are proof of initiative on our part, and while the projects are not large in comparison with some others, they nevertheless constitute valuable additions to regional supply.

Portland General Electric Co. has also initiated a major development of the upper Deschutes River more than 4 years ago when it filed license applications with both the Federal Power Commission and the Oregon Hydroelectric Commission for the Pelton project, a proposed 120,000-kilowatt installation. A larger 225,000-kilowatt project, known as Round Butte, also was planned farther upstream. Although the Federal Power Commission expeditiously licensed the Pelton project, the objections of the fishing industry prevailed within our own State commission, and suit has been brought against the Federal Power Commission questioning the latter's jurisdiction. As a result we have not been able to proceed with construction. The city of Tacoma faces a similar situation with its proposed developments of the Cowlitz River.

In relating the foregoing, I have endeavored to indicate that the local non-Federal electric systems of the Pacific Northwest are anxious to exercise their own iniative in correcting the region's power deficiency by themselves constructing projects to the full extent possible, but that they nevertheless face barriers in the way of quickly filling up the large gap of deficiency which would be left by an abrupt discontinuance of the program of multipurpose development which the Federal Government has been aggressively prosecuting.

During any readjustments of the program, there should be time allowed for concomitant readjustment of the region itself to the changing set of conditions which will confront it. There is real necessity for interim continuance of appro-

priations such as we have asked for in order to prevent an otherwise unavoidable injury to the economic and industrial prospects of the Pacific Northwest region.

Thank you for this opportunity to express the views of myself and my associates in Portland General Electric Co.

DISAGREEMENT WITH STATE AGENCIES

Mr. WARREN. And I would like to signify the agreement of our company with what has been said by the previous witnesses and also to emphasize our readiness to go in and develop power facilities to the extent that it is made possible by law.

We have under construction now some small projects. We have been working for some years to build on to the Deschutes River and have not been able to go ahead yet.

Senator CORDON. Why have you not been able to go ahead?

Mr. WARREN. We have not been able to arrive at any agreement with the State agency with regard to the preservation of fish, and with the State hydroelectric commission.

We secured a permit from the Federal Power Commission, and the State has contested that. It is now under suit in the Federal court in San Francisco.

Thank you very much.

Mr. ERDAHL. The next witness, the representative of the Puget Sound Power & Light Co., is Mr. R. F. Plymire.

PUGET SOUND POWER & LIGHT CO.

STATEMENT OF R. F. PLYMIRE, GENERAL COMMERCIAL MANAGER

PREPARED STATEMENT

Mr. PLYMIRE. Mr. Chairman, I want to indicate wholehearted support of the statement which our chairman, Mr. Erdahl, has given. To save the committee's time, I have a prepared statement, which indicates that concurrence, and I respectfully request that it be made a part of the record.

Senator KNOWLAND. It will be made a part of the record.

Mr. PLYMIRE. Thank you.

(The statement referred to follows:)

STATEMENT BY R. F. PLYMIRE, GENERAL COMMERCIAL MANAGER, PUGET SOUND POWER & LIGHT CO.

My name is R. F. Plymire. I am employed by the Puget Sound Power & Light Co., a privately owned electric utility company with principal headquarters at Seattle, Wash. I appear before this committee today as the company's representative on the Pacific Northwest Utility Conference Committee, on behalf of which our chairman, Mr. Erdahl, has just testified.

My company is engaged in the business of generating, transmitting, and distributing electric energy in the western or Puget Sound section of the State of Washington, comprising approximately 3,400 square miles and having an estimated population of about 500,000. Service is furnished at retail to approximately 169,000 customers. While over half of these customers live in rural and farming areas, the company also serves substantial residential, commercial, and industrial load in about 275 communities. Included among the industrial customers are those engaged in the production of light metals and chemicals, the building of airplanes and ships, processing of food products and the manufacture of woodpulp, other wood products, and cement. Through these industrial customers the area served makes a substantial contribution to the national-defense

effort, as well as through the support given to strictly military installations located therein, such as the Bremerton Navy Yard, the Ault Field Naval Air Base and various other military operations. The company owns and operates 5 major hydroelectric plants and 1 steam plant, the combined capability of which (including some minor hydroelectric plants) is about 320,000 kilowatts. These plants are tied together by an integrated and interconnected transmission system which, in turn, is interconnected at several important points with the Northwest powerpool, with which entity the company has been identified since its beginning.

Because it appeared that the Federal Government had assumed the responsibility for development of large power projects in the Northwest, my company, as is the case with the other public and private utilities represented here today, has become dependent over the years on the Federal system for a substantial part of its power-supply requirements for distribution to its civilian and defense customers, particularly at times when anything much less than average water conditions prevail in the area. The company likewise must bear its share of the effects of brownouts and load-curtailment programs (not to mention high-cost steam operations) to enable balancing loads against available resources under minimum water conditions, the effects of which were so damaging to employment and the economy of the area in the early part of the current 1952–53 season.

My purpose today, therefore, is to subscribe wholeheartedly to the conference committee statement just presented by Mr. Erdahl. We participated along with the other utilities in the preparation of the DEPA estimates of loads and resources set forth in the statement and believe that the indicated future annual power needs are entirely realistic and, if anything, are conservative. We believe, further, that this statement accurately gives your committee a picture, grim as it is, of the long-term precarious power situation in which the Pacific Northwest area finds itself for the reasons outlined.

We would like to respectfully urge that your committee and the Senate body as a whole give favorable consideration, in particular, to the following:

(*a*) Provision of funds adequate to maintain the construction of existing Federal projects in the area on schedule, according to recommendations of the United States Army engineers; namely, the following projects: The Dalles, McNary, Chief Joseph, Albeni Falls, Detroit, Big Cliff, Lookout Point, and Lucky Peak.

(*b*) Provision for new starts, as required, to bring in the additional capacity required in the area as shown by the DEPA estimates, with emphasis on such large upstream storage development on the Columbia River system as will most economically utilize the Federal investment theretofore made in downstream plants. We believe this to be a sound and justifiable program in the best interests of the Pacific Northwest and the Nation as a whole.

Our thanks are extended to your committee for your kind consideration in permitting us to present our case.

Mr. ERDAHL. Mr. Gus Norwood.

THE NORTHWEST PUBLIC POWER ASSOCIATION

STATEMENT OF GUS NORWOOD, EXECUTIVE SECRETARY

GENERAL STATEMENT

Mr. NORWOOD. Mr. Chairman, we appreciate very much the appropriations we have received in the past on this program. There are a couple of points by way of comment on the statement.

The 5-percent figure on annual load growth, we certainly feel, is too low, which makes this report very clearly on the conservative side. If we were to ask for these dams to take on the entire public-utility responsibility, we would have to ask for about 750,000 kilowatts. The statement provides for only about 500,000 kilowatts annually, contemplating that the degree of partnership would be 2 kilowatts on the part of the Federal Government and 1 the part of the local agencies.

We think that partnership may work out for a little while until we can get in better shape to take over a larger proportion.

We stand behind the statement and will appreciate your consideration thereof.

Thank you.

Mr. ERDAHL. And I will ask for a comment from Mr. Frank Jaeger.

STATEMENT OF FRANK JAEGER

GENERAL STATEMENT

Mr. JAEGER. We concur wholeheartedly in the statement and, as the Commissioner of one of the small public-utility districts, I can say we realize what it is to have this power. We have grown far more than what Mr. Erdahl has stated in his statement, because we are in a small, confined industrial area. So, we certainly hope the committee will give consideration to the appropriation.

Mr. ERDAHL. And here to represent the American Public Power Association is Mr. Alex Radin, the general manager.

AMERICAN PUBLIC POWER ASSOCIATION

STATEMENT OF ALEX RADIN, GENERAL MANAGER

GENERAL STATEMENT

Mr. RADIN. Mr. Chairman and members of the committee, I am general manager of the American Public Power Association, which is a national trade association representing about 700 local publicly owned electric systems, primarily municipal districts and public utility districts, throughout the country. Our association held its annual convention last week in Boston, and at the conclusion of the convention the board of directors unanimously adopted a resolution fully supporting the recommendation of Mr. Erdahl. And I wish to introduce for the record resolution No. 4, adopted May 1, 1952, at Seattle, Wash., at the annual convention of the American Public Power Association, as to the Northwest power program.

Senator KNOWLAND. It may go in the record.

(The resolution referred to follows:)

NORTHWEST POWER PROGRAM

(Resolution No. 4 adopted May 1, 1952, at Seattle, Wash., at annual convention of American Public Power Association)

Whereas the Federal Government has become a major supplier of power to the Pacific Northwest through its construction and operation of the Grand Coulee and Bonneville Dams and the Bonneville Power Administration transmission network and

Whereas the development of multipurpose projects on the Columbia River and its tributaries at other points is in progress, namely at Hungry Horse, Albeni Falls, Chief Joseph, and McNary sites, and

Whereas the industrial development of the Northwest has been stimulated in these developments by war needs and the introduction into the Northwest of tremendous industrial plants and establishments producing materials and equipment essential to defense, to the extent that demands for electric power for these and for the region's normal growth have increased more rapidly than can be met by the present rate of progress in the construction of power-producing plants now authorized and/or being built by the Government, and

Whereas this has resulted in an area power shortage situation likely to last throughout a considerable period of years in spite of the efforts of non-Federal agencies to add to their own electric power generating capacity by the construction of plants of their own, and

Whereas this situation, which is not of the Northwest's making, will retard the sound economic development of the area, and reduce its ability to contribute adequately to national defense: Now, therefore, be it

Resolved, That the American Public Power Association urge the Congress of the United States of America to make available and to restore where necessary the appropriations now requested and required to maintain on schedule as now determined the progress on its construction projects on the Columbia River now under way and to give immediate consideration to appropriations to start new projects which it has already authorized but has not begun, and be it resolved further,

That the association by proper representation to Congress urge the Federal Government to facilitate by new legislation if necessary, and by any other practical and proper measures, the construction by non-Federal public agencies of power developments not presently authorized for development by the Federal Government to the end that the people of the Pacific Northwest may meet their mounting power requirements by their own development of resources within their area.

Mr. ERDAHL. And here representing Seattle's city council is Councilman Bob Jones.

CITY OF SEATTLE, WASH.

STATEMENT OF BOB JONES, MEMBER OF SEATTLE CITY COUNCIL AND CHAIRMAN OF UTILITIES COMMITTEE

PREPARED STATEMENT

Mr. JONES. Mr. Chairman and gentlemen, may I put this in the record?

Because of the questions, I would like to highlight, however, some of these matters.

Senator KNOWLAND. Your statement will go in the record.

(The statement referred to follows:)

STATEMENT RELATIVE TO APPROPRIATIONS FOR THE CONSTRUCTION OF MULTIPLE PURPOSE PROJECTS ON THE COLUMBIA RIVER AND ITS TRIBUTARIES

(By Bob Jones, member of Seattle City Council, chairman of Utilities Committee, city of Seattle, Wash.)

I am here representing the city of Seattle which owns and operates the second largest municipally owned electric utility in the Nation. We serve over 210,000 customers using 2¼ billion kilowatt-hours per year. During the 5-year period ending with 1953 we will have spent 78 million in new generating and transmission facilities. The addition to our Gorge plant on the Skagit River amounting to 60,000 kilowatts accounted for $12½ million; improvements to our Diablo plant cost $4 million; the new Ross plant, which has two units in operation, with the third unit to be completed this fall, giving a total capacity of 270,000 kilowatts, cost $45 million; transmission lines and substations have cost $16.6 million. In addition to these expenditures we have completed the Ross Dam and Reservoir, during the period prior to 1949, providing river regulation for the three plants at a cost of $29 million; bringing the total expenditure for new generating facilities up to $107 million.

In spite of these new additions the city of Seattle will have to continue to rely on the Federal plants on the Columbia River system to supply the additional power required to meet our rapidly growing loads. Even with the Ross plant completed we will require about 120,000 kilowatts of continuous firm energy from the Government's system during the 1953–54 year.

All of the utilities in the area operate as a part of the Northwest power pool which increases the efficiency of the operations and creates about 600,000 kilowatts of additional firm capacity which would not be available under isolated utility operations. Our operating committee of the Northwest power pool has just completed a long-range study which indicates that with the completion of the projects now under construction we will be in a very tight power situation again within 6 to 7 years' time. This study has been based on future load estimates amounting to an annual increase of about 5 percent while the average increase has been more in the neighborhood of 10 percent during the past 12 years.

To meet this situation which will develop in the next few years we must have the construction of new capacity started by 1954 as it takes from 5 to 7 years to build these hydro plants. We want the project which will do the most good and that means that we will have to have additional upstream storage projects.

I respectfully urge that your committee give every consideration toward the start of one of the upstream storage projects on the Columbia River or its tributaries. At the same time, I wish to assure you that Seattle will continue to pursue its policy of building the maximum of new capacity consistent with its physical and financial limitations.

Respectfully submitted.

BOB JONES,
Member of Seattle City Council, Chairman of Utilities Committee, City of Seattle, Wash.

GENERAL STATEMENT

Mr. JONES. I am representing the city of Seattle, which Mr. Erdahl has said is the second largest municipal utility in the United States. We are over 50 years old and have 210,000 customers.

The utilities of the Pacific Northwest have tried to keep up with the expanding population by spending huge sums of money for transmission lines, generation, and so forth.

Senator CORDON. How much generation is there in the city of Seattle?

TOTAL POWER GENERATION

Mr. JONES. We just brought in 60,000 kilowatts at the Gorge plant at a cost of $12½ million. We spent $4 million on the Diablo plant. We spent $16,600,000 on transmission lines and substations. We are now spending $45 million on three units at Ross. They are 90,000 kilowatt units. We have two of them in. And that will be a 270,000 kilowatt powerhouse at the foot of that dam.

The United States Government has taken over the dams on the Columbia River and some of its tributaries, and we find ourselves now in the position, as the Seattle City Light, that we are at the limit of generation that we can build on the Skagit River.

Senator MAYBANK. How much money did the Government spend out there? You are talking about how much you spent. How much has the Government spent out there? Billions and billions. We have been appropriating money here ever since 1941 for those projects.

Mr. JONES. That is right.

Senator MAYBANK. We ought to have that for the record. Will you furnish it?

Mr. JONES. That is for the Pacific Northwest. I happen to be talking now for the city of Seattle.

GOVERNMENT EXPENDITURE IN SEATTLE

Senator MAYBANK. Well, how much has the Government spent out there? How much did the United States Government spend on the city of Seattle? You are talking about how much you spent.

Mr. JONES. As far as the Government spending on the city of Seattle goes, I don't think they spent anything.

Senator MAYBANK. How about the dredging, the rivers and harbors, and everything else?

Mr. JONES. What is your question, sir?

Senator MAYBANK. How much has the United States Government spent?

Mr. JONES. Well, I just told you they have spent maybe a couple or 3 or 4 or 5 billion dollars on the whole river.

Senator MAYBANK. I am not talking about that, but the city of Seattle.

Mr. JONES. That is right.

Senator MAYBANK. What is the cost of dredging the harbors? What did the city of Seattle pay for its docks? They are municipally owned; are they not?

Mr. JONES. The docks?

Senator MAYBANK. Yes.

Mr. JONES. Well, the port of Seattle has the docks.

Senator MAYBANK. Well, of course. There is no use to talk about how much you spent unless you know how much the Government spent.

Mr. JONES. The question was asked by one of the Senators here as to how much we were spending.

Senator MAYBANK. Well, I asked you how much the Government spent. That is what I wanted to know.

Mr. JONES. I tried to tell you that.

Senator MAYBANK. Well, tell me. How much did the Government spend?

UPSTREAM STORAGE

Mr. JONES. However, may I say that regardless of how much money we spent, with our expanding population it will be necessary that we have some 120,000 kilowatts of firm power from the Columbia River Dams of the Government in the 1953 and 1954 period. We are afraid and are fearful that we might, as I would call it, get into a vacuum whereby nothing would be done, and therefore we would find ourselves in a continuing power shortage, as we have been in the past where we have lost huge sums of money by being in that power shortage.

So I therefore respectfully urge that this committee give due consideration for upstream storage, with the pledge that the city of Seattle will continue to do everything in its power to help out in this very serious situation.

Senator ELLENDER. Does the city of Seattle produce power as cheaply as the Federal Government?

Mr. JONES. Yes, they do, sir. We have one of the best rates in the country.

Senator MCCLELLAN. What you people are interested in is to try to know definitely what the Government's program is, so that you can make your plans accordingly.

Mr. JONES. That is right, sir.

Senator MCCLELLAN. And if you do not know what they are, or if you rely upon one program, and then another one is adopted that

makes less power available, you incur a shortage, and you have not prepared for it.

Mr. JONES. That is right. And we cannot go on the Columbia River to build any dams, because of the fact that the Federal Government is on there.

POWER FROM GRAND COULEE AND BONNEVILLE

Senator MAYBANK. Do you get any power from Grand Coulee or Bonneville?

Mr. JONES. We are getting very little. We are getting some. At one time we were getting 11 percent.

Senator MAYBANK. Well, 11 percent is a big load.

Mr. JONES. But remember that we were producing 89 percent of our own power at that time.

Senator MAYBANK. I was just wondering if you were getting the power from the Federal Government.

Mr. JONES. We have to, because we can't go anyplace else. They have the dams on the river.

Senator MAYBANK. Then why did you not build the Grand Coulee or Bonneville? Why did you not build those dams out West?

Mr. JONES. Why didn't we?

Senator MAYBANK. Yes. Did the Federal Power Commission deny you a license?

Mr. JONES. At the time, sir, that the Grand Coulee Dam was built, it would not have been necessary for us to build it, and we wouldn't have had the money to build it, because we didn't have that much power use.

QUESTION OF POWER NEED

Senator MAYBANK. I am going to thoroughly agree with you, because we are in the same situation in the Southeast. We have not got the power down there now to use, and all the power programs down in the Southeast, to the best of my knowledge, that have never been developed by private industry, are now being fought against by private industry. And I am one who has believed in private industry. But your power has increased. You have no power need greater than the Senator from Georgia who sits on my left, or than I have, from the Carolinas, where they just haven't got the power.

Mr. JONES. I only want to say that we have produced for ourselves in the city of Seattle and paid for some 600,000 kilowatts that we have now under operation.

Senator ELLENDER. You stated that the city of Seattle produced power as cheaply as the Federal Government?

Mr. JONES. That is right, sir.

Senator ELLENDER. They are now obtaining 11 percent?

Mr. JONES. That 11 percent was sometime ago. We may be getting more now, sir.

POWER COST

Senator ELLENDER. Well, whatever it is. Are you paying for this power as cheaply as you produce it? Or are you paying more for it?

Mr. JONES. We are paying more for it, sir.

Senator ELLENDER. You are?

Mr. JONES. Yes, sir. We are paying more for it than we can produce it for.

Mr. ERDAHL. I might say, Mr. Chairman, that I left myself wide open when I introduced Bob Jones, he having the second largest municipal utility in the United States, and I knew that. But, knowing that you, sir, have been to our good city of Tacoma, you will know that he is second to the city of Tacoma. So let that be part of the record.

SITUATION OF CITY OF TACOMA

But as far as the city of Tacoma is concerned, we, too, are in that position. And I might say that I have before me a chart that shows the expenditures of the private and the public utilities in our area, and the expenditures for 10 years past and 5 years into the future, keeping up our side of it, showing the expenditure of $1,031 million. We are not back here to ask you gentlemen to do more than you determine you ought to do, whatever it may be. I think we have a perfect right, however, to come back here and ask you genetlmen if you are going to maintain that public-utility responsibility, and if not to tell us as best you can as soon as you can. Because we, on the other hand, are going to have to pick up that slack that has developed there. And you cannot get away from it. It is there, and it is going to be with us. We are not talking about new industries that we are going to inveigle out there from other parts of the country. The industry and the people are there, and are using this power in larger amounts year by year. So that we have got to determine, or it has to be determined, at the earliest possible time.

Now, if the Federal Government determines that some of these projects that they have authorized on the main stem of the Columbia are not to be built by the Federal Government, it will take some cooperation on the part of the Congress before we, as non-Federal utilities, can go into the picture and build some of these large dams.

I might say, sir, that we can finance some of these big projects now, if that is the wish of the Congress. We must go ahead and meet the needs of the people.

I might say for the city of Tacoma: We have been trying for 5 years to build a hydro project on one of the tributaries.

It is a little bit irritating for us to find that members of the Federal Government come before our State legislature and try to influence policy decisions, to stop us from building our project with our own money, at the same time not meeting the public-utility responsibility from the standpoint of the Federal Government.

Those things, gentlemen, do present a problem for us. We have tried our best to build all the capacity we can. And I might say for the city of Tacoma: we cannot afford to buy power from the Federal Government.

Senator ELLENDER. Are you buying any at all?

Mr. ERDAHL. Yes.

FEDERAL POWER PURCHASED

Senator ELLENDER. What percentage of what you use?

Mr. ERDAHL. We bought about $1,750,000 worth of power in 1952 from the Federal Government.

Senator ELLENDER. Do you produce your own power as cheaply as you can obtain it from the Federal Government?

Mr. ERDAHL. Cheaper. We can't afford to buy from the Federal Government. I want that to be very clear——

Senator ELLENDER. How much more does the power you obtain from the Federal Government cost you than to generate it yourself?

Mr. ERDAHL. In our recent Federal Power Commission hearings, we put the figure of about $14.50 as against $17.50 a kilowatt-year.

INTERVENTION OF FEDERAL GOVERNMENT

Senator MAYBANK. Mr. Chairman, might I ask a question? And I ask these questions respectfully, because I want to get the record straightened out.

What officials of the Federal Government, you suggested, came before the legislature, in substance, to lobby against your organizationn? Did I understand you correctly?

Mr. ERDAHL. The Division of Wildlife of the Department of the Interior.

Senator MAYBANK. Who was it?

Mr. ERDAHL. The individual?

Senator MAYBANK. Yes.

Mr. ERDAHL. Mr. Kemmerich.

Senator MAYBANK. And they lobbied in the legislature? You did not use that word. I used it. But they spoke before the legislature of your State to get the members of your legislature to side with the bureaucracy in Washington as against what you might believe to be State's rights or city's rights in Tacoma? Mr. Kemmerich and who else?

Mr. ERDAHL. He was the only one who appeared officially before the group.

Senator MAYBANK. And he spoke on the legislation to stop your own State progress, as your legislature would envisage it?

Mr. ERDAHL. That is correct.

Senator MAYBANK. Thank you.

Mr. ERDAHL. I bring that out only because it does present a real problem from our standpoint.

Senator CORDON. Let the record show, Mr. Chairman, so that there will be a reasonably complete statement that that representation was made by the Fish and Wildlife Service in support of what it alleges to be its duty in protecting a salmon run and salmon spawning areas that are necessary to maintain a commercial fishing business in the Tacoma section.

Senator MAYBANK. Well, Senator, I was not questioning that.

Senator CORDON. I just wanted the reasons present in the record, so that it would not appear as purely a matter of whim and caprice.

Mr. ERDAHL. That is correct, Senator. I must add, though, since I am here before you gentlemen, that for them to use an argument on fisheries against us and to use an argument to you to support Federal projects does not quite tell it either.

Mr. Chairman, I ask your permission to put this into the record to show that we have spent large sums of money also, and we are asking cooperation on the basis of this partnership.

Senator KNOWLAND. It may go in the record.

(The material referred to follows:)

Pacific Northwest Utilities Conference Committee—Capital expenditures for additions of individual utilities and public-utility districts

Utility	Actual		Estimated, 1952 to 1956, inclusive	Total, 1941 to 1956, inclusive
	1941 to 1946, inclusive	1947 to 1951, inclusive		
Washington Water Power Co	$7,655,973	$38,630,000	$44,538,000	$90,823,973
Pacific Power & Light Co	9,628,157	46,657,740	44,520,400	100,806,297
Portland General Electric Co	11,532,479	37,146,321	100,000,000	148,678,800
Tacoma City Light	27,227,168	14,008,333	179,060,530	220,296,031
Seattle City Light	19,994,555	56,000,000	70,000,000	145,994,555
Mountain States Power Co	7,114,727	22,303,649	21,750,000	51,168,376
Puget Sound Power & Light Co	20,910,954	31,981,813	30,000,000	82,892,767
Public utility districts and cooperatives, western group, Northwest Power Pool	(1)	55,100,000	135,500,000	[2] 190,600,000
Total	104,064,013	301,827,856	625,368,930	1,031,260,799

[1] Not available.
[2] Partial.

Mr. ERDAHL. That completes our group, and we thank you very much for your time and consideration, and hope that you are able to give us an answer, and that you will meet the problem with us or give us some idea of how we might more cooperatively, on a different partnership arrangement, solve this very important problem in the area.

Senator DWORSHAK. Mr. Chairman, I should like to detain Mr. Wegner, of Spokane, Wash, who represents that company, for 2 or 3 questions.

CABINET FORKS DAM

I wanted to put into the record the fact that your company has recently completed construction on the Cabinet Forks Dam on the Columbia River.

Mr. WEGNER. We are presently completing it, technically speaking. I say we are presently completing it, because three units are in operation now, and the fourth and last will come into operation about the 1st of July.

Senator DWORSHAK. This is evidence that at least the Washington Water Power Co. recognizes its own responsibility to generate as much power as it can for the Northwest pool, and it does not rely to any great extent upon power generated by the Federal dams in the Columbia River Basin.

Mr. WEGNER. That is a fair statement, Senator. Yes, sir.

Senator DWORSHAK. I think that is very essential, Mr. Chairman, to have that brought out, because too frequently we read, and in fact I think Dr. Raver, the Administrator of the Public Power Administration, before a subcommittee of the Appropriations Committee, recently stated, that it was his opinion, that the Federal Government was responsible for generating power necessary to meet the needs not of the Federal Government or the priority customers, preference customers, but rather to meet the growing needs of the private utilities.

I disagreed with him at that time, because I contend that it is the duty of the private utilities operating in the Columbia River Valley to do everything within their power to meet the demand for increased power.

You agree with that?

Mr. WEGNER. Yes, Senator.

May I invite your attention to the testimony that Mr. McLung gave and Mr. Warren, that other private utility companies are also doing what they can in the respective areas to develop power themselves. Mr. McLung of Pacific Power & Light, who spoke, can tell you that they are completing a project.

Senator DWORSHAK. Where is that located?

Mr. WEGNER. On the Lewis River, about 50 miles northeast of Portland.

Senator DWORSHAK. How much does that generate?

Mr. WEGNER. 108,000 kilowatts, Senator, with an ultimate capacity of 200,000 kilowatts.

LOCAL EXPANSION OF POWER FACILITIES

Mr. ERDAHL. May I, in fairness to the public group, say that there is the Pond Oreille Public Utility District that is building a dam out there. Seattle Light, of course, is going ahead with the expansion of their facilities. Tacoma is expanding their plant. And the Rock Island plant is being expanded by the Chelon Public Utility District. Generally all of the non-Federal utilities, wherever possible, are doing everything they can, and we only ask that there be an early solution to this problem, because, in the interest of the national defense as well as our own economy, there must be power to meet the needs that are there, defense inudstries as well as our homes and commercial institutions.

STATEMENT BY CHAIRMAN

Senator KNOWLAND. Thank you, Mr. Erhdal. There are a lot of problems that need early solutions.

The next witness on our schedule is Mr. King.

CITY OF EUGENE, OREG.

STATEMENT OF OREN KING, REPRESENTATIVE

AMMON CREEK FLOOD-CONTROL PROJECT

Mr. KING. Mr. Chairman and gentlemen, it is certainly a pleasure, and I wish, in behalf of the citizens of Eugene, Oreg., and the surrounding area, to express appreciation for this brief hearing here. This is not going to take very long, and I have no other witnesses with me.

This is on a small Ammon Creek flood-control program for the city of Eugene. It has been going on for some time, and I just want to appear before you in further justification of the appropriation of $245,000 in the budget at the present time.

GOVERNMENT EXPENDITURE

Last year, the Federal Government expended $318,000 for this portion at the lower end in red shown here. This is Fern Ridge Reservoir. All of the floods originating out here to the south of the

city, on a quick runoff, come through the city and on out to the west and are drained into this reservoir.

Now, first I would like to bring this to your attention. The city of Eugene is very willing, and has been very willing, to provide its funds in this connection. It voted $400,000 in a bond issue in 1948. It is prepared to go ahead and do the work within the city.

At that time, in 1949 and 1950, we entered into an agreement with the United States Army engineers wherein we would make this overall flood-control project. It is well defined in that connection.

The city of Eugene could empty it out over here [indicating], but that was inhuman, and they did not want to do that; so we entered into this program, and under the Federal Government's prerequisites you have to buy rights-of-way to do this.

We could buy the right-of-way within the city, but no one could buy it outside the city.

Now, we have to start in at the lower end. I concur with the Army engineers on starting at the lower end and working up. The green is what is to be done with these $245,000. These are just bottlenecks to get us out of the emergencies that occur every month, with all of the schools and everything in this area. We are back here again to justify your appropriating the $245,000 that is in the current budget at this time, so that we can complete this work this year.

Most of the money has been spent today, as I say, $314,000, before the city in April appropriated $85,000 more for our participation in this work this year, and by the completion of this work we will then be able to get the benefits of the project for the 80,000 people who live in this area plus the high value of land.

This down here has just been approaching it; and, of course, it is needed each year to complete this job. This will complete this work up to this place [indicating], up to this stage, and we are all ready to go. We are buying the rights-of-way now. We have appropriated our money, and it is in the 1953 fiscal budget, and this is just further justification on your part to appropriate this money for this fine flood-control project.

I wish I could state here that the city of Eugene would pay the whole thing; but, as you know, a city cannot do it. The city down here is not organized so far as bonding, and so forth, and so we cooperated with them. This is a well-defined flood-control project. We do feel perhaps this will assist you a little bit when this appropriation comes to your attention.

Senator KNOWLAND. Thank you very much.

The Arkansas River Basin situation is next, and we will call on Mr. Dave Terry.

ARKANSAS RIVER BASIN

ARKANSAS RIVER BASIN ASSOCIATION, LITTLE ROCK, ARK.

STATEMENT OF DAVID D. TERRY, REPRESENTATIVE

PREPARED STATEMENT

Mr. TERRY. Mr. Chairman and gentlemen of the committee, we have been allotted 30 minutes, I believe, and we have 4 witnesses, including myself, appearing before you to emphasize the necessity of

bank stabilization on the Arkansas River between Tulsa and the mouth of the river. We have found that, although the Government has spent millions of dollars and the levee districts have spent hundreds of thousands of dollars in making levees to protect the land, it has been worked out, and the levees have caved in, and they have had to put in setback levees, and in the course of time the river creeps up to the setback levees.

We have found, and I think that the engineers will say, that what we need is stabilization of the banks and rectification of the channel.

I am going to submit a brief statement here, for the record, in order to save time.

Senator KNOWLAND. The statement may be printed in full in the record.

(The statement referred to follows.)

STATEMENT OF DAVID D. TERRY, OF LITTLE ROCK, ARK.

My name is David D. Terry, of Little Rock, Ark. I am making this statement at this hearing as a member of the Arkansas-Oklahoma Interstate Committee appointed by the Governors of Arkansas and Oklahoma to represent these States in the development of the Arkansas River. Also I represent the State of Arkansas as the director of the flood control division of the Arkansas Resources and Development Commission.

The experience of the landowners in the lower Arkansas River Basin has resulted in a definite desire on their part for measures to be taken which will result in a fixed course for the river. The meanderings of this river constitute a continuous threat to the economy of the river basin. Real emergencies exist in many places and new ones are constantly threatening. Progressive bank stabilization throughout the river basin seems to offer the best solution to the problem.

The annual loss of thousands of acres of the most fertile lands in the valley, through bank caving and the construction of setback levees, is a definite fact and a positive economic loss, not only for this region of Arkansas, but for the Nation as a whole. We feel that it is absolutely necessary to exert continuous efforts to reduce the large annual losses of this rich and productive river valley land. We, therefore, urge that most careful consideration be given to providing the necessary funds. We are mindful of the real necessity for national economy but we believe that funds for preservation of our river basin resources will result in increased national income and should be considered as a necessary Federal expenditure.

For many years a real effort has been made to protect against flood damage by the construction of levees. Millions of dollars have been spent in the Arkansas River Valley for levees and setback levees. Many recently constructed levees are threatened by bank caves. The condition ranges from acute to probable. There are over 30 specific locations between Fort Smith and the mouth of the river where progressive caving threatens or has already breached levees. Specific data regarding these danger points will be presented by other witnesses at these hearings.

Setback levees completely eliminate or greatly reduce proper land utilization of highly fertile and productive lands. Testimony has been previously presented to the effect that numerous levee districts have suffered severe financial losses in providing rights-of-way for setback levees. I am definitely of the opinion that progressive bank stabilization over the years would have preserved much fine land and, I believe, would have proven much less expensive. I believe that the experiences of the past should dictate that bank stabilization should proceed as rapidly as possible. Former practices have not yielded permanent benefits.

In addition to bank stabilization, the efficacy of channel rectification has been demonstrated. Two cutoffs, one at Morrilton and one at River Mile 118, the Hensley Bar Cutoff, have been completed since 1950. They are proving effective. Bids will be received, so I am advised, within the near future for the Holla Bend Cutoff near Dardanelle. We think funds should be provided for other cutoffs at such locations as determined by engineering studies. It is a fact that prior to making the Morrilton Cutoff, there had been constructed at least five setback levees. These levees did not do the job. The net result of the setback levees was the impoverishment of the levee district. The new cutoff has, we believe,

permanently solved the river problem at this location. We believe that similar treatment of the river at other locations can provide solutions for other problems.

It is the desire of the State of Arkansas that adequate funds be recommended for appropriation by the Congress to be used as follows:

(*a*) To proceed with planning and construction of bank stabilization works and cutoffs at such locations and in such order as may be determined to be proper by the Corps of Engineers.

(*b*) To continue and complete such works as are now in progress.

(*c*) To provide funds for emergency repairs.

Your careful consideration of these matters will be appreciated by the people of Arkansas. The needs for the work requested are positive and the benefits which will result will exceed the cost.

Mr. TERRY. At this time I will call upon Mr. Emmett Sanders of Pine Bluff, Ark., who is the president of the Arkansas Basin Association.

Mr. SANDERS?

ARKANSAS BASIN ASSOCIATION

STATEMENT OF EMMETT SANDERS, PRESIDENT, PINE BLUFF, ARK.

GENERAL STATEMENT

Mr. SANDERS. Mr. Chairman and gentlemen, we will be just as brief as we possibly can, in deference to you gentlemen. We know you have been through a very trying day. We hope, however, that you will not consider that any lack of concern on our part for the portion of the project which we shall endeavor to present to you today.

I would like to call to the attention of the committee in the beginning this map, which I have here on display, the purpose of which is to show the watershed area of the Arkansas River. And if you will note, it covers a seven State area. All the waters from this watershed area I am pointing out here on the map travel the course of the Arkansas River, entering the Mississippi River here at the point I am indicating with my finger.

We are, as you can see, on the very tail end of the stream. It can be seen that we have to cope not only with the waters from our own area but with the waters from all this other area above us.

Our problem, gentlemen, is a growing one in this respect, that as the area is developed, as the forests are denuded, drainage structures are built, and the water is rushed into the streams, and it reaches us in an increasing amount all the time, at a more rapid pace.

So, as I say, as all the area in the watershed develops, our time down here is magnified and grows in just that respect.

CONCENTRATION OF WEALTH AND DEVELOPMENT

I would like to point out, too, that insofar as our particular area is concerned in the State of Arkansas, the Arkansas Basin, our area represents the concentration of the wealth and the development of the State.

The four largest municipalities are located upon the banks of this stream.

In the area that I am speaking of, there are perhaps some 115 crossings of various types, railroads, transportation bridges, gas lines, utilities of various sorts.

And I wish the time might permit me to point out to you the area that some of these utilities serve, and you would immediately see that I am correct in my statement to you at this moment that the problem that we are presenting to you is not just a local one confined to our own area, but that it is a much wider one.

As a matter of fact, some of these gas lines, for instance, that I am referring to, serve areas extending all the way to the State of New York, and many of the large industrial areas in between.

BANK STABILIZATION URGED

So that I am saying to you, then, again, that the problem that we are attempting to present to you is not confined to us just down in that little restricted area that we represent at this moment.

The thing that we are advocating to you today, gentlemen, I will say to you, will eventually be done. The demands will require it. The only question is, when it will be done.

We want to urge upon you today a program of bank stabilization upon the Arkansas River.

Now great strides toward economy in this program have been made since I will say 1946 when the overall plan of improvement for the Arkansas River was approved and adopted. Prior to that time construction was only a little hit-and-miss proposition dictated largely by emergency but since that time the construction that has been had on this stream has been designed to fit into the overall plan on a permanent basis so that as I say to you, great strides have been made in the matter of economy.

Senator CASE. Does the witness mean by that that the design for the stabilization is predicated upon the construction of the several reservoirs above this area which are shown on your map including, for example, such controversial dams as Tuttle Creek.

Mr. SANDERS. We are not discussing with you today the matter of reservoirs.

DEGREE OF STABILIZATIONS

Senator CASE. No; but the degree of stabilizations, the revetments, and those things—are they predicated upon the design reservoirs for holding back water above?

Mr. SANDERS. Not totally; no, sir.

Senator CASE. Will these works that you are talking about handle the problem if the dams are not built?

Mr. SANDERS. Not entirely; no, sir.

Mr. TERRY. Not as applicable to flood control and navigation. On the Missouri River General Sturgis found, we had a report on it, that stabilization for flood control is just as essential as if they were marking——

Senator CASE. My point was whether or not the height to which build your levees if it is levees or the distance back where you put your dikes, are those at the height and to the distance that would be needed if there were no reservoirs built or do you expect these reservoirs will be built?

Mr. SANDERS. Let me answer it this way: It is my understanding that the levees that have now been built in our area are designed to meet and allow for some increase in the highest waters of record.

Senator CASE. I will ask that question of the engineers.

Mr. SANDERS. Now I have a picture here, Mr. Chairman. It will take just 8 minutes by timing to show and I think the picture will tell relatively better than words some of the problems that we have.

INDIVIDUAL CASE CITED

Senator MCCLELLAN. While they are arranging for that picture and immediately following his testimony, I should like to place in the record a letter from Mrs. Leigh Kelley, of Fort Smith, Ark., who wrote and sent some pictures of her farm and her sister, that has been in the family 75 years or longer, showing exactly what conditions are on her farm and the losses they are sustaining of fertile soil and acreage.

They have lost 300 acres over the period of 50 years and lost 50 acres in the year 1950 of that kind of soil.

I would like to place this letter into the record immediately following Mr. Sander's testimony.

Senator KNOWLAND. That letter may go in the record at this point.

(The letter referred to follows:)

KELLEY REALTY CO.,
Fort Smith, Ark., May 6, 1953.

Hon. JOHN L. MCCLELLAN,
United States Senate, Washington, D. C.

DEAR SIR: Most of Arkansas' resources are in farmlands. The mountain and hill lands of the northwestern half of the State were badly exploited by big timber companies from out of the State. Thirty years ago local citizens who had tried and found that they could not afford to reclaim these forest lands, persuaded the National Forest Department to take over several million acres. More recently, the high price of cattle has enabled the farmers to do much soil conservation on hill lands.

The Arkansas River valley has some of the richest land in the United States, but the floods have become so devastating that Congress, finally admitting that Arkansas belonged to the Union, voted some money for flood control. This program of dams, while only partly constructed, seems to be saving us from the major floods.

The program of the Army engineers, as I understand it, called for dams on the river and its tributaries, and bank stabilization, especially below the dams. For lack of funds being voted for this purpose, the result is what you may see in the enclosed pictures.

We are Arkansas River farmers. This land which you see going in the river was cleared off by my father, a ragged Confederate soldier, 75 years ago. It has been enlarged and operated by the family ever since. We are now five elderly sisters and are still farming our own land.

Over 60 years we have lost some 300 acres of land by floods. In 1950 we lost 50 acres in 1 year. Our neighbors have lost as much.

I have just read that Russia and our country have about the same acreage of arable land. Her land is undeveloped. If she progresses as fast in farm machinery as she has in aviation production, she will soon run us a close race in food production.

We farmers have been encouraged to exploit our land to feed the world through two world wars. We have shipped tons of topsoil to feed war devastated nations. We have slashed our timber, plowed up grasslands to put in wheat and now we must save ourselves in the most expensive way. The flood control dams are an emergency measure. With them must go upstream dams, cattle ponds, sodding and timber conservation carried on by private citizens, State, county and the Federal Government. Please bear in mind that our four big river valleys are all suffering. Without the Mississippi, the Ohio, the Missouri, and the Arkansas rivers and their valleys, our country would closely resemble Australia. The last great flood on the Missouri River cost the Government more in lost income taxes than a fat-sized appropriation. We have had many such floods on the Arkansas and Mississippi.

Privately, we do not believe in combined power and flood control dams, but that power seems to have become a political football, and we had rather have those than nothing.

I just read of the finished construction of a power dam in Germany at the cost of $33,000,000.

When your committee goes to consider flood-control appropriation please don't consider it just pork barrel. Think about miles and miles of food producing land going down the river to the Gulf.

In a long cold or hot war with Russia, food may well be the winning factor.

Yours very truly,

Mrs. Leigh Kelley.

BANK EROSION

Senator Knowland. You may proceed.

Mr. Sanders. These pictures are taken in the area extending north from Little Rock upstream.

The first picture we had showed the banks. That particular barge is one of the material barges operating in the general area.

You are beginning to see now some of the type banks that we have in that section. The depression you see back of there is a main line of railroad. This shows you how close the channel of the river is to a main line railroad.

If it is clear you can see the telephone poles in the background. At this point what you see hanging over the bank is a fence line where someone has been attempting to carry on some farming activities and the land caved off into the river.

Here again you see in the dim background not too far back the levee line.

This is the point where the bank is caving back toward that levee line you saw a moment ago.

Those small objects you see on the top are the cattle grazing and I think you can realize some of the hazards to the party who owns cattle and has them grazing at a point such as that.

Again we see some of the background characteristics of the area. There is the headquarters house which showed how close the bank had caved.

This is what the engineers would call a hard point. This is the other end of it. That is their effort to go from one hard point to another hard point where there is no danger of cave-in to put in their protective devices.

LEVEE LINE

Any one dam—again there is the levee line directly behind it. You see there how near the caving bank is to the levee line.

I also think you gentlemen know a levee is no good at all if the bank on which it rests caves out from under it.

A chain is as strong as the weakest link. There is a bank you can see caving in to the river. Anyone can look at that and tell without any difficulty that it is high type farm land.

The levee line is just behind the line of trees.

Senator McClellan. There goes a tree.

Mr. Sanders. There again you see a fragment going over into the river. I might say to you that you will find actually these are very small fragments that you see here. Again I call attention to the character of the soil.

Here is another scene where the channel of the river has practically encroached on the levee. There is a fragment, a good-sized one which is ready to go off. This general line we are showing you here shows a very small area between the river bank and the levee line.

LEVEE LINE CAVE-IN

I think we are about to see now the end, it will be facing us in a moment, where a levee line has caved off into the river.

Here we are. You are looking directly into the end of the levee which means that the boat where we are traveling down the river, prior to the time that caved off, it was levee and now it is in the river.

We will see the other end of it in just a moment. This picture here, I wish it were plainer but there are two setbacks where the levee caved off twice.

You see the first line out in front then you see the line farther back.

There you are. Also this picture tells another story. You can see the area between the levee and the river is practically rendered valueless.

It loses all of its utility. When you speak of land that is destroyed by the setback levee there is a classic example of it right there. We are on the crown of the levee here. To the left there you saw how close the river was to the floor of the levee. On the right you see some of the farming area the levee protects.

Now there is the end of the levee that has caved off into the river. You are looking directly at the end of it. This, I believe, is the other end. All that area before was solid ground, levee line.

Now it is river. This shows the end of the levee down at the end. I presume in this picture we are pointing out to you a half dozen places where the levee caved off into the river and is now the channel of the river.

Gentlemen, when that land is gone it is like where does the light go when you turn the light out? It does not come back. It has never come back within my experience.

CHARACTER OF FARMING

That is to show some of the character of the farming area. Here is a warning put on the highway by the State department showing the danger in that area from the caving banks.

This man we see there in the foreground, if you watch, you will see him disappear into a crevasse there, and then we will get a picture of the crevasse. There is another man on the levee. They are evidently doing some surveying.

You can see the very small area between the levee line and the river.

It is not unusual for that amount of land to cave away, I would say, overnight.

Senator RUSSELL. How long has it been caving that way?

Mr. SANDERS. I am glad you asked that question, Senator. This problem really has developed in just the comparatively recent years. Probably the explanation of it is, as I pointed out in the beginning, the development of the area, the dumping of the water into it, the removing of the forests and vegetation. It created this caving bank situation.

There is a man that I told you about a moment ago. That situation will get worse.

Senator RUSSELL. How are you going to do something about it? You build the levees to protect the country in flood.

Mr. SANDERS. I will show you that in just a moment. We are practically at the end of the picture now.

There is the same barge we saw a moment ago.

LEVEE WEAKNESS

Senator DWORSHAK. Why did not those levees do the job in the first place?

Mr. SANDERS. The levees are absolutely no good if the bank on which they stand topples away.

Senator DWORSHAK. Didn't the Army Engineers Corps know that?

Mr. SANDERS. Yes, sir.

In just a moment I will show you the protective device we are advocating to you today.

Senator MCCLELLAN. I may say for the information of the Senator the general plan included bank stabilization to protect the levees and that is the part we are asking for funds for.

Senator RUSSELL. Are you proposing to pave the basins of the river as they do in the basin of the Mississippi with those tremendous installations?

Mr. SANDERS. No, sir.

Senator DWORSHAK. How long ago were those dikes located in that stretch of the river?

Mr. SANDERS. I cannot answer that directly. They have probably been put in the last 10 years. I will show you some in a minute. We are now leaving the area. I did not get an opportunity to point out to you that the last thing we saw was the water wells for one of the municipalities that was being threatened by caving banks.

We are just about at the conclusion.

Mr. TERRY. A lot of those levees were built as late as 1946.

Mr. SANDERS. You see that is soil all the way down. That is the type of land we have throughout that area.

It will grow anything in the world. There again is a place where the river is practically at the levee.

REGULARITY OF EROSION

Senator DWORSHAK. How many weeks during the year does this erosion occur?

Mr. SANDERS. Beg your pardon?

Senator DWORSHAK. How many weeks during the year does this erosion occur?

Mr. SANDERS. It all depends on the stage of the river and the frequency in which we have those stages of the river and that does not happen with any regularity. But it does not take an overbank stage of the river, actually, to do the damage.

If we have a high river it softens the bank and it will slough off more than if the water is over the bank. The sloughing off comes when the river recedes.

That is what I meant when I said a while ago the things we are talking to you about today eventually have to be done. There's no other way.

It is a question of when it will be done. There is the end of a levee there in the foreground that has gone into the river.

There is a bridge showing one of the structures that the protective measures we are advocating protects.

In presenting our case today we have tried to observe certain criteria. We are presenting projects here which have been prepared by the engineers, all of which fall into 1 of 2 categories, either emergency or continuing. Some of them fall into both of those categories. They are projects in which the Federal Government already has investments, and the money that we are asking for here was contemplated at the time as being necessary to complete them.

TOTAL PROJECT COST

Those projects that we are recommending to you total $11.5 million.

The Truman budget recommended $4,800,000 and the Eisenhower budget recommended $4,800,000.

In our judgment and that of the engineers we can economically and judiciously expend the amount of $11,500,000 but we leave the determination of the final figure to your judgment, whether it is the $11.5 or the $4.8 million, and also leave to the discretion of the engineers the exact points where the moneys will be expended.

We are not able to say. We would like to point out, too, what we are advocating to you today is noncontroversial.

There is a complete spirit of harmony among all the folks in the basin. What we are asking for is a program of construction regardless of where it may be.

OTHER EROSION EXAMPLES

Now I want to display these pictures. There are other things I would like to say but time will not permit. This will give you an idea of the sort of work here that we are talking about; for example, here is a railroad bridge, one end of which was lost just recently.

Now this is a picture of the same bridge after revetment was put in. That bridge is now considered safe.

Here is a caving bank situation such as you just saw in the picture.

Here is what is called pile dikes. Just recently we made an inspection trip down the river and we saw an instance just like we pointed out here where the levee had gone into the river. In 1947 this pile dike was put in. Since that time—this is a statement of the engineers, not mine—not 1 foot of bank has been lost. That shows the permanence and effectiveness of the kind of work we are asking for.

Gentlemen, we appreciate your consideration.

Senator McCLELLAN. This is not something new. This is a part of the original plan when they said build the levees, they said that this would have to be done. There is nothing new about it.

Mr. SANDERS. That is correct.

PROTECTION WORK

Senator McCLELLAN. The only thing is we are behind with the protection work. The levees are built and the money has not been made available to do their other work; and, as a result, each year you absolutely aggravate the situation and it is going to cost more and more not only by setback levees but you have further assaults upon the bank and, therefore, it makes a wider area there that has to be protected, whereas if you get to it in time and do a little of that protection work you not only protect the levee but you protect further caving at much less cost.

Mr. SANDERS. That is correct. Here is an illustration where the Government has already done some work. That will be lost unless the additional protecting work such as we are talking about here is done and that was contemplated.

Senator KNOWLAND. Thank you very much.

The Congressman from Arkansas, Congressman Trimble, is here. Congressman.

STATEMENT OF HON. JAMES W. TRIMBLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. TRIMBLE. I do not desire, Mr. Chairman, to take up any time. I want to defer all my time to these gentlemen who made this long trip. I do concur with Senator McClellan that the work here is necessary to protect an investment which the local interests and the Government have in these projects up and down the river.

In my own district all the levees are like this up and down the river. I hope this committee can see its way clear to give us enough money to protect the investment already there.

Thank you very much.

Senator KNOWLAND. Glad to have you here before the committee.

Mr. TERRY. Senator McClellan, a moment ago talked about the frequency of setback levees. You have—up above Little Rock they had about five setback levees that they had to put in one after the other.

Senator McCLELLAN. Congressman, all that could have been avoided if this protective work had been done.

Mr. TERRY. If this had been done, that would not ever have happened.

The next witness we have is Mr. Ben Morris of England, Ark., who happens to be president of the largest levee district in Arkansas.

PLUMB BAYOU LEVEE DISTRICT, ENGLAND, ARK.

STATEMENT OF BEN MORRIS, PRESIDENT, BOARD OF DIRECTORS

GENERAL STATEMENT

Mr. MORRIS. Mr. Chairman and gentlemen of the committee, I am president of the board of directors of Plumb Bayou Levee District.

This was organized in 1905 and for the purpose of constructing a levee from North Little Rock to below Pine Bluff.

STATE LAND PROTECTED

This district protects approximately 550,000 acres of the most fertile lands in Arkansas. This land produces better than 50 million dollars' worth of crops annually, it is estimated.

We have never had but one serious break on our levee since we organized or built it in 1905, and that was during the overflow in 1927.

Our problem is not now so much—we are not worried about the overflow proposition with the levee we have now to protect our lands, but we have run into a problem of caving banks.

It is a problem we can't cope with. The cost of that and the engineering required of it, we think, can only be done by the Corps of Engineers backed up by Congress appropriating money for bank stabilization.

SETBACK LEVEES

We had our first experience with the setback levee in 1911. Since that time we have constructed 21 setback levees, and since the Corps of Engineers took charge of that emergency work in 1942 they have constructed 5 setback levees which cost in excess of $700,000, and it is estimated we have lost over 16,000 acres of our most fertile land that is gone forever into the river.

We think there that the only economic solution of this problem—we have the levees there; we have millions of dollars invested in levees; and, if we are going to continue to let the changing currents of the river destroy those levees, we are going to have this problem on our hands always, and we think the solution of the problem is bank stabilization.

BANK STABILIZATION

We have quite a bit of bank stabilization on the Arkansas River, as has been brought out. As we understand it, the Budget Bureau has approved or recommended $4,800,000 for this stabilization work this year. Of course, we trust that you gentlemen will recommend that nothing be cut off that and if possible that that appropriation be increased, because we think we could use considerably more than that amount of money.

I thank you.

Mr. TERRY. Our next and final witness is Mr. J. W. Hull, who is president of Arkansas School of Technology at Russellville and former president of the Arkansas Basin Association.

ARKANSAS SCHOOL OF TECHNOLOGY

STATEMENT OF J. W. HULL, PRESIDENT

GENERAL STATEMENT

Mr. HULL. Mr. Chairman and members of the committee, I have lived right on the banks of the Arkansas River for the last 30 years and have observed during that time the things that these gentlemen have been discussing with you here this afternoon.

I would like to call to your attention 2 or 3 things following what Mr. Sanders said with reference to our being at the tail end in getting all of the water that comes from 7 States, and the property owners

up and down the river in Arkansas back many years ago thought that they could handle this problem themselves. As Mr. Morris said, in 1905 they organized the first levee district and tried to build levees.

I will say to your frankly: if you take care of this water from 6 States above us and not let any of it come down to Arkansas, we might do the job ourselves, but we cannot do it with the water from the 6 States all going through Arkansas.

PROBLEM

Point 1 is that makes it a national problem and not a local problem. Second, I have seen every foot of this river through Arkansas either from boat or from the air, and this picture shows very vividly some of the things, but I would say that the engineers have some of the best parts of it and not some of the worst.

These little hunks of dirt you saw falling off are very, very small compared to the way it does cave.

I want to call your attention to the fact that it is not when the water is up over the bank and the levee is holding it in when we get most of this problem of cave-in. It is when the water is from 5 to 6 feet below bank level and it is soaking in under there and sloughing off.

PROJECTS UNDER CONSTRUCTION

Now I want to leave this map, not for the record but for your information, showing the projects on the river that are under construction now that we are asking for money to continue and the critical points that are there now that have not been started.

The $11.5 million that we think could be used to advantage this year we would certainly like to have that much and this is not a contribution as we see it. This is an investment. The Federal Government is the only agency that is able to make this investment and over a period of years to come this investment will be paid back in the land it will save and the contribution that the citizenship in the valley will make to the State and to the Nation.

In closing let me say that our boys that are leaving this valley to fight for me and you, I feel that it is our obligation to do this job now so that they will have their soil and their homes to come back to to earn their livelihood.

We appreciate very much your staying this long and giving us this time and we certainly hope that nothing less than what has been recommended in the budget will be approved this year and I am of the opinion that I think it would be economical and would save us money in the long run if the total of $11.5 million was appropriated this year instead of next year and the years to come.

Thank you.

Mr. TERRY. Mr. Chairman, that is our case and we thank you very much for your patience here.

Senator KNOWLAND. Glad to have had you.

INDIVIDUAL CASE

Senator MCCLELLAN. Following the closing of the presentation I would like to have inserted into the record a statement by Mr. Claude Reece of Russellville, Ark., who did appear before the House committee

the other day but could not be here today and asked that his statement be placed in the record.

(The statement referred to follows:)

STATEMENT IN BEHALF OF DARDENELLE-CARDEN BOTTOM-HOLLA BEND LEVEE DISTRICTS AREA, POPE AND YELL COUNTIES, ARK., ON ARKANSAS RIVER BETWEEN MILES 258 AND 233

This is a 2 page statement, with 5 exhibits, about the needs for emergency flood-control work at certain specific critical points on a project on the Arkansas River between Dardanelle Rock, river mile 258, and the mouth of Petit Jean River, river mile 233, and is generally referred to as the Dardenelle-Carden Bottom-Holla Bend area. Exhibit 1, attached, shows the Dardanelle-Carden Bottom area south of the Arkansas River in Yell County, and upper and lower Holla Bend area north of the river in Pope County.

There are 17,000 acres in the area south of the river, which are taxed to secure funds for the purchase of rights-of-way, maintenance and incidental expenses.

These lands are highly productive and in recent years produced annually, cotton, cottonseed, cattle, hogs, broilers, soybeans, corn, hay and spinach, with total values in excess of $3 million. Within this area live more than 200 families, who, together with farmers living outside the district, produce these crops. A State highway traverses the entire length of the area, on which are located a high school, many modern homes, barns and broiler buildings, which are within the flood plain. A project levee constructed by the United States Corps of Engineers on rights-of-way furnished by the landowners, is more than 20 miles long.

Due to the ravages of floods, and limited productive acres, the Upper and Lower Holla Bend Districts in Pope County, north of the Arkansas River, were unable to qualify for standard project levees such as have been constructed on the south side of the river in Yell County. The completion of the overall project will give added protection to these small districts and add material benefits to the entire project, which has been justified without consideration for the benefits to the Holla Bend Districts.

Exhibit 2, attached, is a view at point E on exhibit 1. About 2,000 feet of the project levee and a large segment of State Highway No. 155 have gone into the river. A relocated portion of State Highway No. 155 has gone into the river since the picture was made, and a small loop levee, which will give protection against only moderate floods, and for only a limited time, has been constructed by the landowners. Present plans contemplate immediate construction of a large setback levee to protect the area until the Holla Bend cutoff, shown on exhibit 1, is completed. When the Holla Bend cutoff is completed, the program will be almost complete.

Exhibit 3, attached, looking upstream, shows a caving bank at the toe of the project levee at point F on exhibit 1, near river mile 238.

Exhibit 4, attached, looking downstream, shows the completion of two dikes, at a point immediately upstream from point F on exhibit 1. These dikes were recently completed by the Corps of Engineers and a recent inspection indicates that they are already diverting a portion of the flow of the Arkansas River from the area shown on exhibit 3, downstream.

Exhibit 5, attached, looking downstream, at Mile 253, shows rock revetment at top and bottom of picture, and recently constructed dike connecting them.

The funds appropriated by the Congress on the Arkansas River in recent years have been funds which have been justified on the basis of flood control and emergency bank protection. Statements by representatives of the Corps of Engineers before the Subcommittee of the Committee on Appropriations, United States Senate, 82d Congress, 2d session on H. R. 7268, gives a priority to the Holla Bend cutoff and states "that would protect the near Dardanelle levee and Carden Bottom Drainage District No. 2 levee by excavating a pilot channel across Holla Bend." In effect, we believe the Corps of Engineers have testified, and will testify again, that Holla Bend cutoff has been justified on the basis of flood control and emergency bank protection and it is needed to control the levee below Dardanelle and thus reduce the threats in that area to levees and land, and the threats in that area are real.

During the past 30 years, the landowners in the Dardanelle-Carden Bottom area have constructed 7 set-back levees at the point shown on exhibit 2. The lands on which each set-back levee was constructed have long since gone into the Arkansas River. They are now called upon to furnish rights-of-way, which will cost the landowners approximately $10,000 for a Government constructed set-back levee, which will give protection to the lands within the 2 districts for a period of 2 to 5 years. If Holla Bend cut-off is not made, then the time will come when another set-back levee must be constructed.

The lands in the Dardanelle District area, where the set-back levee must be constructed, are already burdened with indebtedness far beyond the ability of the landowners to pay. To acquire the rights-of-way needed for the set-back levee, a few landowners, whose chief income is from other sources, must pay for these rights-of-way for the benefit of the whole area.

Those who are in a position to know, state positively that the cut-off is the only feasible solution, and that the time for its completion may be too late.

Respectfully submitted

DARDENELLE DRAINAGE DISTRICT,
By: WALTER COOPER,
W. H. MCCLURE, Jr.
ROBERT KEENAN,
Commissioners.

and

CARDEN BOTTOM DRAINAGE DISTRICT,
By: ROY TILLMAN
ROBERT KEENAN
W. H. MCCLURE, Jr.
Commissioners.

Project	Estimated cost	Available through fiscal year 1952	Appropriated, fiscal year 1953	Emergency and continuations urged for fiscal year 1954
	In thousands	*In thousands*	*In thousands*	*In thousands*
Bradens Bend	$6,800	$1,010	$1,151	$1,500
Van Buren and Crawford County Levee Districts:				
(*a*) Van Buren and upper Crawford County	2,750			500
(*b*) Lower Crawford County	6,500			500
McLean and Hartman Bottoms	4,800			1,000
Dardanelle Drainage District and upper end Cardens Bottoms	6,700	804	987	1,000
Cardens Bottoms and west of Morrilton	6,500		500	
Morrilton Cutoff and Conway County Levee Districts Nos. 1, 2, and 8 (Mary House place)	1,070	410	142	500
Perry County (right bank) and Faulkner County Levee District No. 1 (left bank)	3,700			500
North and south banks below Little Rock	14,700			3,000
Below Little Rock	5,700	1,823	400	1,000
Pine Bluff to Rob Roy Bridge	7,230	546	401	
Rob Roy to Ark Post	28,760	1,206	175	2,300
Ark Post to Yancopin	1,400	338		
Total needed for emergency and continuation projects, fiscal year 1954				11,500

Identification of localities, Arkansas River and tributaries, Arkansas and Oklahoma—Emergency bank-stabilization program

Local interests		Corps of Engineers	
River mile upstream end of reach	Area affected or reach name	River mile upstream end of reach	Reach name
376	Bradens Bend	376	Wilsons Rock to Missouri Pacific R.R. bridge.
354	Van Buren and upper Crawford County	354	St. Louis-San Francisco Ry. bridge to Flat Rock Bend.
347	Lower Crawford County	347	Flat Rock Bend to Vache Grasse Bend.
	Trustee Bend	342	Vache Grasse Bend to Bluff Contact. Trustee Bend.
302	McLean and Hartman Bottoms	302	Okane Bend to Patterson Bend.
257	Dardanelle Drainage District	257	Dardanelle Rock to Reeds Ferry.
	Below Dardanelle		Below Dardanelle.
	Holla Bend Cutoff		Holla Bend Cutoff.
240	Carden's Bottom and west of Morrilton	240	Reeds Ferry to Morrilton Bridge.
	Carden's Bottom dikes		Carden's Bottom dikes.
217	Morrilton Cutoff	216	Upstream Morrilton Cutoff to downstream Morrilton Cutoff.
	Morrilton Cutoff		Morrilton Cutoff.
209	Conway County Levee districts Nos. 1, 2, and 8	209	Downstream Morrilton Cutoff to Cadron Ridge.
	Mary House Place		Mary House Place.
200	Perry County and Faulkner County No. 1	200	Red Hill to Hickmans Bend.
165	North and south banks below Little Rock	165	Rock Island R. R. bridge to White Bluff.
	Fourche Island levee or Fourche place		Fourche Island levee or Fourche place.
	Browns Bend		Browns bend.
	Estes place		Estes place.
	Warings Bend		Warings Bend.
	Harris Bend		Harris Bend.
	Brodie Bend		Brodie Bend.
130	Adamsburg Landing to Hensley Bar	130	White Bluff to Jefferson County Free Bridge.
	Adamsburg Landing		Adamsburg Landing.
	Hensley Bar Cutoff		Hensley Bar Cutoff.
	Jack Bradley Bend		Jack Bradley Bend.
102	Pine Bluff to Roy Roy Bridge	102	Jefferson County Free Bridge to Rob Roy Bridge.
	Plum Bayou to Rob Roy Bridge		Plum Bayou to Rob Roy Bridge.
89	Rob Roy Bridge to Arkansas Post	89	Rob Roy Bridge to Arkansas Post Canal.
	Below Rob Roy Bridge		Below Rob Roy Bridge.
	New Gascony		New Gascony.
	Brunsons Crossing		Brunsons Crossing.
	Kimbrough-Mud Lake		Kimbrough-Mud Lake.
42	Arkansas Post to Yancopin Bridge	42	Arkansas Post Canal to Yancopin Bridge.
	Medford Bend		Medford Bend.

BRADENS BEND, OKLA.

(Continuing, $1,500,000)

Work in this area is under construction. The area is immediately upstream from Fort Smith and consists of a series of sharp bends where meandering of the river has maintained critical conditions for the past 30 years. At a place called Wilson's Rock there is a rock bank which has remained unchanged over a long period of time. Downstream from Wilson's Rock caving banks have already caused abandonment of the Kansas City-Southern Railroad line to Fort Smith and a national highway. The river now threatens to intercept the Poteau River 8 miles above the mouth. This would isolate and destroy 10,000 acres of valuable farmland. Also in recent months caving has been very active in the vicinity of mile 365 and over a mile of the approved alinement for a much-needed levee to protect the Moffett Bottom area has caved into the river. The bank now is less than 2,000 feet from United States Highway No. 64 and the city of Moffett, Okla. The disastrous results which would occur if this work were not continued are obvious.

VAN BUREN AND CRAWFORD COUNTY LEVEE DISTRICTS, ARKANSAS

(New locations: Van Buran and upper Crawford County, $500,000; lower Crawford County, $200,000)

(1) *Van Buren and upper Crawford County.*—This area is located along the left bank of the Arkansas River near the city of Van Buren, Ark., between miles 353 and 351. The maximum caving is between miles 352 and 351 where the bank is caving an average of 200 feet per year. The history of the area is summed up as one levee setback after another. In a period of 11 years caving of the left bank immediately below Van Buren has progressed about one-half mile and most of the caving has occurred since 1945. Several levee setbacks have been made and hundreds of acres have been lost. Additional area will be lost unless steps are taken to prevent the caving. The top of the bank at mile 352 is nearing the setback levee completed in November 1949.

The Van Buren flood wall and Crawford County project levee which protect the city of Van Buren and over 15,000 acres of rural lands and communities are endangered by these caving banks. Produce from the area supplies local canneries with produce of corn, tomatoes, greens, and other vegetables. Fresh produce is shipped to major cities in a wide radius and to nearby Army installations. During the past few years we have seen this area reduced and have seen thriving local businesses collapse because of loss of land.

In addition to the problem already involved in setbacks and the consequent loss of farm lands, any additional setbacks in this area (miles 353–351) would require extensive and very expensive alterations to the storm drainage system of the city of Van Buren which discharges into Ned Lake in the Crawford County levee district.

We recommend that funds be provided for the construction of about 2 miles of revetment along the left bank to prevent further caving between miles 353 and 351.

The stabilization of the bank in this area would prevent a setback levee to replace the one constructed in November 1949 at a cost of about $150,000 and the loss of about 300 acres of valuable farmland now protected that would be left unprotected on the riverside of the levee if the setback is made. Extensive and expensive alterations to the existing stormwater drainage system of the city of Van Buren would cost about $400,000. It would also protect the project levee of the Crawford County Levee District that protects over 15,000 acres of valuable agricultural lands and small communities.

(2) *Lower Crawford County (Trustee Bend).*—The area under discussion is between miles 340 and 337 and is known locally as Trustee Bend. This bend lies generally in a north-south direction and has been moving steadily downstream in an easterly direction by means of gradual and continual caving of the left bank between miles 338.5 and 337.5. This caving now also threatens the Crawford County project levee. Between the latter part of January and the middle of April 1952, the bank had caved 40 feet and was only 100 feet from the toe of the levee. Construction of a setback levee at this location is opposed by the landowners because it would leave about 700 acres of land that are now protected outside the leveed area. A setback levee at this location would cost about $175,000 and would provide only temporary relief. We recommend instead the excavation of a cutoff across the Trustee Bend loop. We believe that the excavation of a cutoff across this loop would afford immediate relief to the left bank at mile 338. The revetment of the cutoff could be delayed for a number of years.

The work recommended will provide protection for the project levee of the Crawford County Levee District between miles 338.5 and 337.5, and the benefits that will result therefrom will be far reaching in view of the fact that the levee protects over 15,000 acres of agricultural lands which produce food and fiber crops with an estimated annual value of nearly $2 million. Produce from this area supplies local canneries with produce of corn, tomatoes, greens, and other vegetables. Fresh produce is shipped to major cities in a wide radius and to nearby Army installations.

McLEAN AND HARTMAN BOTTOMS, NEAR PARIS, ARK.

(New location, $1 million)

This area is located along both banks of the Arkansas River between two stable and fixed points, one of which is located near Roseville, Ark. (mile 302.0), while the other point is located at Pattersons Bluff about 10 miles downstream. Bank caving in this area is quite extensive along both banks of the river.

The McLean Bottom project levee is located along the right (south) bank of the river between miles 301 and 293. Along the left (north) bank of the river is an area known as the Hartman Bottom. The Hartman Bottom at present is unprotected by a levee system.

Along the McLean Bottom project levee there are four locations at which caving of the right bank is active. There is not much safety in sight when at one of these locations the bank is within 100 feet of the toe of the project levee. This is particularly true where the bank has caved an average of 200 feet per year in the past 10 years. Only one of these locations is as much as 500 feet from the levee. Increased activity at any one of the locations would seriously threaten the McLean Bottom levee.

The McLean Bottom project levee protects about 10,000 acres of agricultural lands which produce food and fiber crops valued at over a million dollars annually.

Caving of the left (north) bank of the river adjacent to the Hartman Bottom between miles 296 and 294 has been very active since August 1951. At mile 295.5 the left bank has caved northward over 200 feet. The caving in this area is 700 feet per year.

The Hartman Bottom area, which is at present unprotected by a levee system, contains about 6,400 acres of agricultural lands and produces food and fiber crops valued at approximately $1 million annually. The Hartman Bottom was formerly protected by the high left bank of the river against stages up to 40 feet on the Ozark gate. However, due to the caving of the high bank between miles 296 and 294, this area is flooded at a 30-foot stage. Should this caving be permitted to continue unchecked, it is probable that the caving would continue into Ashey Lake, thence into Hartman Lake and return to its present channel near Pattersons Bluff. Such meandering would cause the complete destruction of these fertile and productive agricultural lands.

With the estimated rates of caving as stated above and considering the time required to perform the required construction, it is considered extremely urgent that construction be started with the minimum of delay. Failure to do so will surely require the construction of setback levees for the McLean Bottom project levee and the probable complete destruction of the Hartman Bottom.

The funds recommended would be used to start the construction of dikes, revetments, and other control works in this reach to impede the active caving.

BELOW DARDANELLE, ARK.

(Continuing, $1 million)

The Arkansas River divides Pope County and Yell County downstream from Dardanelle. In Yell County, south of the river, a 29-mile United States engineer-constructed levee protects 20,000 acres of farmlands which have a value in excess of $4 million, from which is harvested annually farm products which have about the same value as the land.

Prior to the completion of the project levee by the Corps of Engineers in 1948, the landowners in this area had expended almost $500,000 in their fruitless efforts to protect their lands from floods. In some instances these private levees were topped by high water and in other cases they caved into the river. The Corps of Engineers constructed levees that held the floods except where caving banks took them into the river. At mile 248 almost 2,000 feet of the standard project levee has gone into the river, leaving this vast area of farmland open to destruction by medium-sized floods which occur several times annually. This caving at mile 248 started less than 2 years ago. Local farmers have completed, at their own expense, a "loop levee" around the breach in an effort to hold back the floods until more permanent facilities can be made.

Funds were made available during the recent session of Congress to initiate work for the construction of a cutoff across the Holla Bend loop. While it would have been most desirable from the viewpoint of the landowners to have the banks of the river stabilized in their present location, we can benefit from experience of other people in a similar situation. You may recall that on the Missouri River

at St. Joseph, Mo., the United States engineers have spent millions of dollars trying to hold such a bend as we have at Holla Bend. Because of the difficulty and expense of maintaining the loop at St. Joseph and the damage that resulted from the 1952 flood, the engineers have been forced to construct a cutoff across this loop. We have profited by this experience on the Missouri River by starting construction of the Holla Bend cutoff as originally planned. We earnestly plead for the appropriation of sufficient funds to complete this cutoff in the shortest possible time.

When the river is made straight at this point, about 3,000 acres of land in upper Holla Bend will be saved and 2,500 in lower Holla Bend can be protected. Also, more than 20,000 acres now protected by the near Dardanelle and Cardens Bottom levee projects will be saved to produce food and fiber for future generations.

CONWAY COUNTY LEVEE DISTRICTS NOS. 1, 2, AND 8 (MARY HOUSE PLACE)

(Continuing, $500,000)

The left bank of the Arkansas River between miles 205.5 and 204.0 has been caving at irregular rates over a period of years. During the last 2 years the caving has increased to such an extent that the top of the bank is now within 100 feet of the toe of the Conway County Levee Districts Nos. 1, 2, and 8 project levee at what is known as the Mary House Place. Also threatened in this area is a large drainage structure (triple 7- by 7-foot concrete box culvert) which handles the flow of Gap Creek through the levee.

The damage and expense that would result if the levee is breached and drainage structures lost was so great that the Chief of Engineers authorized the Little Rock district to transfer funds from other projects in order to start work on a system of pile dikes to protect these facilities during the fall of 1952. It is our understanding that the transferred funds will have to be repaid from the fiscal year 1954 appropriation.

Funds in the amount of $200,000 are required to complete the work that was started with the borrowed funds and an additioual $300,000 is needed to replace the advanced funds.

The completed work will prevent the building of an expensive setback and save the drainage structure at Gap Creek. This project levee protects about 14,500 acres of agricultural lands which produce food and fiber crops valued at nearly $1¼ million annually.

PERRY COUNTY AND FAULKNER COUNTY LEVEE DISTRICT NO. 1

(New location, $500,000)

This critical area is located along both banks of the Arkansas River between miles 199.5 and 199.0. An island which extends between miles 198 and 197 now divides the flow of the river. As a result of the divided flow caving is active against both banks. Along the left bank caving is active for about 1 mile below mile 199 where the top of the bank is getting dangerously close to the Faulkner County levee district No. 1 project levee. This project levee protects over 9,500 acres of valuable and highly improved land on which is produced over $800,000 worth of food and fiber crops. Along the right bank at mile 197 the top of the bank during April 1952 was only about 50 feet from the toe of the local levee of Perry County levee district No. 1. The rate of caving at this location is about 80 feet per year. This levee protects about 2,000 acres of valuable bottom land.

We believe that about one-half mile of revetment placed along the left bank and one or two pile dikes to close the right chute of the river would protect both levees and solve the problem in this area for several years.

Due to the topography of the Perry County area, construction of a setback is not feasible.

NORTH AND SOUTH BANKS BELOW LITTLE ROCK, ARK.

(New locations: Fourche Island levee, $500,000; Browns Bend, $500,000; Estes Place, $500,000; Warings Bend, $500,000; Harris Bend, $500,000; and Brodie Bend, $500,000)

Downstream from Little Rock to a point nearly 40 miles distant, the Arkansas River flows through a series of mostly long bends, and caving is active at numerous places. Prompt action is needed to begin holding the river in check. On the

south bank of the river the head of Fourche Island to Pennington Bayou project levee protects about 32,000 acres of agricultural land that produces crops valued at nearly $2 million annually. On the north bank the North Little Rock to Gillett (above Plum Bayou) project levee protects over 500,000 acres of land that produces crops valued at more than $50 million annually. As an example of the speed with which these critical locations develop, in this area (between river miles 164.8 and 130.0) there are now 6 critical spots compared with 3 included in last years' Arkansas Basin Association program. We believe that overall control of this reach should be undertaken at once. The right bank of the river in the vicinity of Fourche Place, about 4 miles east and downstream from Little Rock, at mile 156 has caved at a rapid rate during the past year. When the levee was constructed in 1948 it was 850 feet from the bank line. In June 1952 the river had caved the bank to within about 250 feet of the toe of the levee. About 300 feet of this bank caving occurred in the short period during rises in the river early in 1952. If this accelerated rate of caving should continue the levee at this point is in danger of disappearing during 1953. The immediate emergency could be corrected by the construction of about a mile of bank revetment. An application has been filed with the United States engineers for a setback levee that would cost about $20,000. At the present rate of caving this setback levee may be required before 1953.

The land protected by the levee in this locality is highly developed with pecan and peach orchards, truck gardens, and general farms and is very productive. The caving on the right bank of the river in the vicinity of Browns Bend, about 6 miles east and downstream from Little Rock, between miles 152.2 and 151.1, has become very active in the past year. The present rate of caving in this area is over 400 feet per year. In June 1952 the caving bank was only about 550 feet from the toe of the head of Fourche Island to Pennington Bayou levee and an expensive reinforced concrete drainage structure through the levee. We believe that work must be done in the near future to protect the levee and drainage structure. The pressing emergency could be relieved by the construction of about a mile of bank revetment. A set-back levee at this locality would not be feasible as more land would be exposed to the river, the large drainage structure would need to be replaced, a county road would have to be relocated, and the costs of land and construction would be far more costly than the emergency work required to hold the bank in place. The left bank of the river in the vicinity of the Estes Place, about 8 miles southeast and downstream from Little Rock between miles 150.0 and 148.8 has been caving at a rapid rate in the last year. A set-back levee was constructed along the Estes front in 1944 at a distance of more than one-half mile from the river at that time. Since that time hundreds of acres of farm land have caved into the river at this locality and in March 1952 the bank was only about 550 feet from the toe of the levee. Caving is continuing at the rate of 420 feet per year. Because of the excessive caving during March 1952, representatives of the Plum Bayou Levee District discussed the necessity for the construction of a set-back levee this year with the engineer office. Such a set-back levee would cost about $55,000 and would leave a large amount of fertile farm lands exposed to the river. The construction of about one-half mile of revetment and 2 or 3 pile dikes along the left bank in front of the Estes Place would eliminate the need for the construction of the proposed set-back. There would be some additional work required the next year. The right bank of the river in the vicinity of Warings Bend, about 11 miles southeast and downstream from Little Rock at about mile 147, has been subjected to severe caving during the latter part of 1950 to the middle of 1952. In fact, in July 1952 the bank was only about 425 feet from the riverside toe of the head of Fourche Island to Pennington Bayou levee.

Considering that the estimated present rate of caving at this point is about 600 feet per year, it is evident that the levee is in danger of being destroyed in the near future. A setback levee in this area would cost about $120,000, not to mention the land that would be left unprotected riverward from the setback. Funds are being requested for construction of about 1 mile of bank revetment along the right bank as the first step to alleviate the emergency. The construction of the revetment at this time is considered urgent due to the recent attack of the river. The right bank of the river in the vicinity of Pennington Bayou at Harris Bend, river mile 141.5, about 16 miles southeast and downstream from Little Rock, is not caving at a rapid rate at the present time. The top of bank was 1,500 feet from the levee in April 1952. However, the point of caving is working into the low swampy bed of Pennington Bayou and during future rises on the river this soil may cave and wash away at a very rapid rate. The caving is at the lower end of the head of Fourche Island to Pennington Bayou levee project which includes two large reinforced concrete drainage structures near the

point of attack. One of these structures serves the Pennington Bayou drainage area, the other serves the Harris Bayou drainage area. We recommend the construction of sufficient revetment at this locality to prevent further caving. This revetment would protect the levee and the drainage structures and would prevent the creation of a sharp bend in the approach to the proposed Brodie Bend cutoff channel. At Brodie Bend, river mile 135 to mile 133, the left bank caving is threatening the setback levee constructed in 1946 as part of the North Little Rock to Gillett (above Plum Bayou) project levee. Since we last appeared before this committee in support of protection for this area, the county road has caved into the river. Also located in the area between the old frontline levee and the setback levee are five family dwelling units formerly part of a resettlement project of the Federal Government. These farm units have been left unprotected since July 1951 when more than 3,800 linear feet of the frontline levee dropped into the river after failure of the dike system. One of the families recently started moving their farm buildings to another location because the left bank continues to cave. In April 1952 the caving banks had reached a distance of less than 300 feet from the T. A. Gibson private levee located on Hensley Island between miles 133 and 132. This levee protects about 635 acres of agricultural lands. To relieve the caving in the Brodie Bend area and in the T. A. Gibson levee area, it is urgently requested that funds be provided to excavate a cutoff channel across Brodie Bend between miles 138 and 131. This would undoubtedly provide protection from caving banks around the Brodie Bend at much lower cost than bank-revetment works along the left bank around the present tortuous loop of the river.

ABOVE PINE BLUFF, ARK.

(New locations: Adamsburg Landing, $400,000; Jack Bradley Bend, $600,000)

About 5 miles upstream from Pine Bluff, Jefferson County, Ark., the Jefferson County Free Bridge crosses the river. This bridge is the only highway crossing over the Arkansas River between Little Rock, mile 165, and the mouth of the river. The loss of a crossing in this vicinity would cause a tremendous amount of disruption of the trade area of Pine Bluff, Ark., and would affect the operations of the Pine Bluff Arsenal. At present there are some bank-protection works under way, chiefly on the left bank in the neighborhood of Adamsburg Landing and above and along the right bank of the Hensley Bar cutoff. Additional work is necessary to stabilize one of the most critical sections of the river. Funds are requested to start construction on the right bank (mile 128.0 to mile 127.7) in the Adamsburg Landing area of about one-half mile of bank revetment to close the present right-hand chute opposite Adamsburg Landing and extend a pile dike closure structure located at mile 126.5 which was constructed under a previous contract. High flows which have occurred since the completion of the original structure have flanked the riverward end of the existing dike. Failure to obtain funds for the proposed construction could result in the river changing its present course, thereby flanking the completed work in the Adamsburg Landing area and forming an undesirable river trace through the area where considerable money has already been spent to properly aline the river and stabilize its banks. The funds we are asking for will also provide for stabilization of the right bank immediately downstream from the exit of the Hensley Bar cutoff and for stabilization of the left bank between the exit of the cutoff and the Jefferson County Free Bridge in the area known as Jack Bradley Bend. The work should be programed as soon as possible in order to complete the tie-in with the Hensley Bar cutoff bank revetment. This stabilization program will prevent additional caving of the left bank immediately above the Jefferson County Free Bridge where the bank was 400 feet from the North Little Rock to Gillett (Plum Bayou) levee in April 1952. By straightening the channel a desirable direction of flow in the vicinity of the bridge will be provided, thus removing the threat of flanking the bridge. The dikes which now protect the left bridge abutment have recently been repaired after extensive flood damages in the spring of 1951. The dike system is only a temporary solution to the problem which will be greatly relieved by completion of the river realinement upstream from the bridge. We are of the opinion that if funds are not made available for work in this critical reach of the river, it is possible that the work now under way will be lost through action by the river. Should this take place the Plum Bayou and Tucker Lake levees will again be threatened with destruction and the Jefferson County Free Bridge would be in danger of being bypassed or flanked. The annual value of crops raised in the area protected by the Tucker Lake levee amounts to about $500,000 and the annual value of crops in the Plum Bayou protected area is well over $50 million. Certainly this is one reach of river where work should go forward.

BELOW PINE BLUFF, ARK., ROB ROY BRIDGE TO ARKANSAS POST CANAL

(New locations: New Gascony reach, $1,400,000; Brunsons Crossing reach, $500,000; and Kimbrough-Mud Lake reach, $400,000)

Downstream from Pine Bluff the flood plain of the Arkansas River merges with the flood plain of the Mississippi River. The meandering of the Arkansas River is most rapid in this reach and this is particularly significant when we consider that this section of the river flows through an important part of the most productive land in the Nation which produces much of the food and fiber for domestic and foreign use. Continued meandering of the river threatens the protective levees and carries the potential threat of destruction to the lands. Even now the levees are threatened by caving banks at several points. There are 14 natural-gas underwater crossings from Pine Bluff to the mouth and 1 exceptionally important railroad bridge in a section where protection is urgently needed. This bridge is crossed by about 24 heavily loaded freight trains daily and is on one of the principal trunk routes for freight movements from the Southwest. We feel that only a brief consideration of the important areas and facilities will make it apparent that protective work must be continued. In the New Gascony reach active bank caving and misalinement due to the meandering have been in progress for several years on both banks in this locality, in which the controlling north and south bank levees have very limited foreshores at several points. There are also six natural-gas submarine pipeline crossings whose junctions at the north and south banks are jeopardized by caving. The work proposed will provide early protection to the levees where caving is in progress, will protect the bank ends of the pipeline crossings, and will start stabilizing this reach to arrest the meandering which will continue until positive steps are taken to prevent it. The pile dikes will also serve to arrest an indicated channel development between Madding and the recently completed New Gascony pile dike system, which, if allowed to progress unchecked, would result in caving of the left bank, which would endanger the controlling levee a distance of about 3 miles in which the foreshore is 600 to 1,200 feet. Changing channel conditions from above are directing current attack against the bank at this location. Bank-stabilization works are also needed to protect the controlling south bank levee and to prevent development of the channel down the right bank. Development of this channel would result in an unfavorable alinement and would endanger the controlling levee and the right bank ends of six pipelines which cross the river immediately below. The levee is part of a system affording protection to approximately 1,280,000 acres of highly productive farmlands, numerous municipalities, railroads, oil and gas fields, and other developments.

In the Brunsons Crossing reach active bank caving and misalinement due to meandering have been in progress for several years on both banks of the river in this locality. This action has resulted in continuing danger to the north and south bank levees. The work proposed will provide for protection of the south bank where direct attack is endangering the main south bank levee and for upstream extension of the revetment placed in fiscal year 1952 on the north bank where caving threatens to flank the existing revetment and endanger the levee. The levees protected in this locality are parts of the controlling south and north bank Arkansas River levees which afford protection to approximately 1,280,000 acres on the south bank and 568,000 acres on the north bank of highly productive farmlands, numerous municipalities, railroads, oil and gas fields, and other developments. In the Kimbrough-Mud Lake reach the riverbank in this locality undergoes rapid caving at medium and high stages and has been receding at a rate up to 250 feet a year. In addition to being a direct threat to the levee, this rapid caving is also threatening the lower end of the Little Bayou Meto revetment with flanking. Flanking of the Little Bayou Meto protection would endanger the floodgate which is located in this immediate vicinity. The portion of levee which will be protected by the proposed work is part of the north bank levee system which affords protection to approximately 568,000 acres of highly productive farmlands, numerous highways and municipalities, and a railroad.

Senator KNOWLAND. Mr. Robert B. Brooks consulting engineer of St. Louis has requested that his statement on Arkansas Bank stabilization be placed in the record. Without objection, that statement will appear in the record at this point.

(The statement referred to follows:)

Requested Appropriation for Bank Stabilization on the New Gascony Reach of the Arkansas River

STATEMENT PRESENTED BEFORE THE CIVIL FUNCTIONS SUBCOMMITTEE OF THE APPROPRIATIONS COMMITTEES OF THE CONGRESS BY ROBERT B. BROOKS, CONSULTING ENGINEER, ST. LOUIS 1, MO.

The present Director of the Budget, the earlier part of this month recommended and appropriation of $4,800,000 for Arkansas River bank stabilization. While not designated by name in the $2 million recommendation for miscellaneous important protection works, there is one particular item in the vicinity of the village of Madding, Ark., which is of particular importance in the interests of national defense and the public welfare. This has to do with the bank stabilization of that section of the Arkansas River known to engineers as the New Gascony reach, at approximately Arkansas River mile 83.

The Arkansas River, according to the statement to your honorable body some time ago by General Feringa, president of the Mississippi River Commission, is the "most treacherous, unpredictable large stream in the United States."

There are two reason why this particular reach should be protected by bank stabilization this coming year—national defense and the public welfare.

This proposed bank stabilization would tie in with the present engineering works built on the right hand bank of the river. Your records will show that a few miles upstream from the village of Madding, Ark., is the Rob Roy Railroad bridge of the Cotton Belt Railroad. At New Gascony, a system of dikes to protect the main line levee, which is about 550 feet from the top of the river bank, is being built. A picture of the situation downstream from Pine Bluff, Ark., shows that the flood plain of the Arkansas River merges with the flood plain of the Mississippi River. The Arkansas meanders rapidly in this reach. This is particularly important because this section of the Arkansas River flows through the most productive land in the Nation, which produces food and fiber for domestic and foreign use. Continued meandering of the Arkansas River threatens the protective levees and carries additional potential threat of destruction to the lands. Right now the levees are threatened by caving banks at various points.

There are 16 underwater pipline crossings between Pine Bluff, Ark., and the mouth of the river and 2 exceptionally important railroad bridges. These railroad bridges are crossed by many heavily loaded freight trains daily. They are on the principal trunk routes for freight movements from the Southwest.

A brief consideration of the important public facilities and rich land areas, will make it apparent to you that protective work must be continued and money appropriations voted.

In the New Gascony reach of the Arkansas River, river mile 86.0 to 80.5, active bank caving and change of river alinement channel, due to meandering, have been in progress for several years on both banks of the Arkansas River in this locality. Unless bank stabilization is continued, the controlling north and south bank levees will be jeopardized. In the vicinity of Madding, Ark., there are also 6 natural gas submarine pipline crossings, whose junctions on the north and south banks are jeopardized by caving. These pipeline crossings in the vicinity of Madding, Ark., in conjunction with similar pipelines upstream from the Rob Roy Bridge of the Cotton Belt Railroad, are sections of the natural gas pipeline that bring natural gas to the metropolitan area of St. Louis, Mo., which, of course, includes East St. Louis, Venice, Madison, Granite City, Alton, and other Illinois towns, as well as a number of towns in the State of Arkansas. These pipelines were built in the designed river channel after a great deal of study and consideration. The erosion which threatens the main levees and these pipelines is caused by the whiplash motion of the Arkansas River, which initial movement was started many miles above, when necessary cutoffs in the river were made.

As part of the record, in addition to the metropolitan area of St.Louis whose more than a million citizens are supplied with natural gas for cooking and heating and industrial purposes through these pipelines, the following towns in the State of Arkansas are also supplied with natural gas brought through the pipelines crossing the Arkansas River downstream from Pine Bluff, Ark.:

Walnut Ridge	Newark	Stuttgart
Hoxie	Bald Knob	Pocahontas
Alicia	Judsonia	Corning
Jonesboro	Kensett	West Point
Swifton	Searcy	Bradford
Tuckerman	Lonoke	College City
Newport	Carlisle	
Batesville	England	

Here is a list of national-defense products manufactured by the following companies in the Greater St. Louis area, whose manufacturing processes are supplied fuel by this same natural gas:

Scullin Steel Co.: Railroad specialties; locomotive steel castings; castings; carbon and alloy steel.
Hydraulic Press Brick Co.: Haydite insulating block; Haydite aggregate; brick and hollow tile.
Laclede Christy Co.: Clay refractories, sewer pipe, prepared fire clay.
St. Louis Screw & Bolt Co.: Bolts, nuts, screws, and washers; hot galvanizing and plating; special screw and bolt machine products.
St. Louis Car Co.: City passenger cars; buses and trucks; diesel-electric rail cars and locomotives; streamlined trains; steam railroad coaches and freight cars; trackless trolleys.
Missouri Portland Cement Co.: Portland cement.
Granite City Steel Co.: Ingots, slabs, plates, sheets, tin plate, ternes, tin mill black, stainless clad sheets.
Laclede Steel Co.: Ingots, blooms, billets, wire rods, skelp, merchant bars, hot-rolled strip; wright steel pipe, electrical conduit; light wall tubing; steel wire, all grades and finishes, steel joists, reinforcing bars; reinforcing wire mesh; accessories for building and highway construction.
General Steel Castings Corp.: Steel castings weighing 1,000 pounds or more; 1-piece cast steel specialty devices for railroad locomotives; 1-piece cast steel specialty devices for passenger cars.
National Lead Co., St. Louis branch: White lead in oil; lead ozides, lead paint pigments, bentone.
Alpha Portland Cement: Portland cement.
Missouri Rolling Mill Corp.: Reinforcing bars, angles, flats, and steel fence posts; fabricated steel towers, angles, and flats; hot-dip galvanizing; rerolling steel operations.
Evans & Howard Sewer Pipe Co.: Sewer pipe; miscellaneous structural clay products; fire clay, sacked.
Blackmer & Post Pipe Co.: Milled fire clay; vitrified clay sewer pipe; wall coping, flue lining, septic tanks, chimney pipe, chimney tops, draintile.
Winkle Terra Cotta, Inc.: Agricultural terra cotta; hooded chimney tops; terra cotta garden furniture; grave markers.
American Brake Shoe Co.: Brakeshoes for railroads.
Precast Slab & Tile Co.: Concrete roof and floor slabs; insulating concrete; Perlite concrete; plaster aggregate.
St. Louis Malleable Casting Co.: Castings, malleable iron; hot-dip galvanizing; malleable iron washers; pole line specialists; tank car repair castings; brake beam repair parts.
ational Lead Co., Titanium Division: Titanium pigments.
Owens-Illinois Glass Co.: Glass containers; glassmaking machinery.
National Enameling & Stamping Co.: Enameled cooking utensils; galvanized ware; lithographed and japanned ware, tinware, steel drums.
Olin Industries, Inc. (Western Cartridge Co.): Ammunition, shotgun shells; blasting caps, detonators; smokeless powder; air rifle shot; trap and skeet shooting traps and targets.
Aluminum Ore Co.: Calcined alumina, hydrated alumina, gelatinous alumina, activated alumina, tabular alumina, synthetic cryolite, sodium fluoride, sodium acid fluoride, hydrofluoric acid, quicklime, hydrated lime, protective compound, insulating powder.
Lewin Mathes Co.: Copper and brass tubing and fittings; wiping rags.
Obear Nester Glass Co.: Glass bottles, flint and amber.
American Zinc Co. of Illinois (American Zinc, Lead & Smelting Co.): Slab zinc, sulfuric acid, cadmium.
Socony Vacuum Oil Co.: Gasoline, fuels, diesel oils, lubricating oils and greases.
General Chemical Co. (Division of Allied Chemical & Dye Corp.): Processes clays.
American Steel Foundries: Railroad castings.
Monsanto Chemical Co.: Industrial inorganic chemicals, industrial organic chemicals; medicinal inorganic and organic chemicals; insecticides.
Alton Box Board Co.: All types and kinds of paperboard.
Key Co.: Return bands and special steel fittings for oil refineries, tube and pipe fabrication; hand hold and tube hole closures for boilers; pipe joint compounds; steel castings—alloy and carbon; machine work, steel stampings.
Hill Brick Co.: Face and common brick, building tile.
Sterling Steel Casting Co.: Carbon and alloy steel castings.

The bank stabilization work in the vicinity of Madding, Ark., in the New Gascony reach, has been studied for some time by the Corps of Engineers. Some work is being done right now on the right bank. Additional work should be done during the coming season on the left bank of the Arkansas River in this vicinity to arrest the meandering which will continue until the situation is corrected on both sides of the river in this New Gascony reach. The pile dikes which are necessary to be constructed, will serve to arrest an indicated channel development, between Madding, Ark., and the recently completed pile dike system. Should this indicated channel development be allowed unchecked, it will result in the caving of the left bank which will endanger thecon trolling levee a distance of about 3 miles, in which the foreshore is 600 to 1,200 feet. Changing channel conditions from upstream, are directing current attacks against the river bank at this location. This levee is a part of the system which affords protection to approximately 1,280,000 acres of highly productive farmland, numerous municipalities, railroads, oil and gas fields, and other developments.

The bank stabilization which the Congress has authorized and provided funds for, must be continued to a reasonable extent, to protect these lands and these pipelines, in the interests of the national defense and the public welfare.

While this particular construction problem at Madding, Ark., is not specifically mentioned in the $2 million recommended by the Director of the Budget to your Appropriations Committee, it is very definitely in the minds of the Corps of Engineers as being one of those high-priority construction projects on which a continuation of bank stabilization will be done during the coming year when you provide this appropriated money recommended by the Director of the Budget.

(The following letter from Hon. J. W. Fulbright, a United States Senator from the State of Arkansas was received by the committee.)

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
May 20, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Civil Functions Subcommittee,
Senate Appropriations Committee, Washington, D. C.

DEAR SENATOR KNOWLAND: There are several items in the civil functions appropriation bill which are of great importance to my State. I have not taken the time of the subcommittee to testify on the projects but, as you know, witnesses from Arkansas were scheduled and were given an opportunity to submit evidence as to the need for appropriations during the fiscal year of 1954.

Perhaps the most critical need in Arkansas is for bank stabilization on the Arkansas River. As you know, both the Democratic budget and the later budget submitted by the new administration called for an appropriation of $4,800,000 for bank stabilization. I hope very much that your subcommittee will be able to approve this amount.

The elimination of an appropriation for the Table Rock Reservoir is a source of great concern to the people of northern Arkansas and southern Missouri. The previous budget estimate carried $10,800,000 for Table Rock but this amount has been eliminated entirely in the new budget. This will result in an indefinite delay on a project which has been justified for national-defense purposes.

I should like also to express my interest in restoring funds for the Little Missouri River below Murfreesboro for bank stabilization on the Red River and for the continuation of work on the Blakely Mountain and Bull Shoals Reservoirs.

Finally, I should like to express my interest in the restoration of needed appropriations for construction, maintenance, and emergency repair work on the Mississippi River and for overall planning funds for navigation and flood-control studies.

With kind regards, I am
Sincerely yours,

J. W. FULBRIGHT.

PELICAN ISLAND, GALVESTON BAY, TEX.

STATEMENT OF HON. LYNDON JOHNSON, A UNITED STATES SENATOR FROM THE STATE OF TEXAS

NEED FOR NAVIGATION CHANNEL

Senator KNOWLAND. The next project is Pelican Island.

Senator JOHNSON. I appreciate your giving me and my constituents time to present to the committee the need for a navigation channel along the Intracoastal Waterway by Pelican Island in Galveston Bay. Gen. Henry Hutchings, the engineer for the interests constructing the Pelican Island project, accompanied by Mr. Walter Henslee, as coordinator of Pelican project. Their able Congressman, Clark Thompson, is also here and I know he would like to say a word in support of the project.

The Rivers and Harbors Act, approved May 17, 1950, authorized additional improvements along the Galveston Intracoastal Waterway in South Galveston Bay, in accordance with the recommendations of the Chief of Engineers as contained in House Document 196, 81st Congress.

PROVISIONS OF PLAN OF IMPROVEMENT

The plan of improvement provides for the dredging of an alternate channel 12 feet deep and 125 feet wide across South Galveston Bay between Port Bolivar and the Galveston causeway. The estimated cost of this work is $330,000.

To date no funds have been appropriated by the Congress for the construction of this channel, nor is an item for that purpose included in the revised budget estimate for fiscal year 1954 as approved by the Bureau of the Budget. These gentlemen will endeavor to convince you that you should include such an item in the pending bill.

The engineers of the Army assure me they are aware of the benefits that will be realized upon the construction of this navigation channel and they are prepared to initiate the dredging when funds are made available for that purpose.

With your permission I would like to present Mr. Walter Henslee.

PELICAN PROJECT

STATEMENT OF WALTER HENSLEE, COORDINATOR

PREPARED STATEMENT

Mr. HENSLEE. Mr. Chairman and members of the committee, I have prepared a written statement and filed it with the committee.

I will not read that statement.

Senator KNOWLAND. That will be printed in full in the record at this point.

(The statement referred to follows:)

STATEMENT OF L. WALTER HENSLEE OF GALVESTON, TEX.

My name is L. Walter Henslee. I am executive coordinator of the Pelican Island project, a development planned by the city of Galveston. I am representing the city of Galveston in the submission of this statement.

My statement will not describe the feasibility of developing Pelican Island from an engineering or a financial standpoint. Separate statements by experts

in these fields will cover these phases of the development. My statement deals with the importance of rerouting the intracoastal canal, and of doing so immediately.

Although it is located on the gulf coast of Texas, where the industrial boom in recent years has been one of the highlights of our century, and although its position is considerably more advantageous from the standpoint of all types of shipping than any other city along the coast, the growth of the city of Galveston came to a virtual standstill in 1920 because of the limited amount of land available for industrial and residential development. The population of the city of Galveston, according to the United States census, was 44,255 in 1920, 52,938 in 1930, 60,862 in 1940, and 66,568 in 1950. This story speaks for itself. Despite the intense demand for ground, waterfront locations, and locations along the gulf coast generally, there was virtually no increase in population in Galveston. Families who have come to our city in recent years have been forced to find residential accommodations across Galveston Bay, a minimum of 15 miles from employment in Galveston. We have one of the finest deepwater channels in the United States, and it has been developed almost to a saturation point. It is impossible to locate new industries on our waterfront without terminating the availability of public wharves and docks, which are the lifeblood of any port city.

Reference to maps submitted along with this and other statements will show that Pelican Island, located immediately across the Galveston ship channel from Galveston proper, and having continuous water frontage on this ship channel equal to the waterfrontage in Galveston itself, consists of approximately 80 percent of the area of the present city of Galveston itself, and is such a short distance away from the city that it could be developed as a downtown industrial and commercial area at a minimum expense and with a maximum return. However, before this development can occur, it is necessary that a bridge be constructed which will join it to the city of Galveston, and which will make rail and truck facilities available to industries, commercial establishments and residences located on Pelican Island.

If the intracoastal canal is moved to the northern tip of Pelican Island, as has already been recommended by the United States engineers and approved by Congress, it will then become possible to construct a bridge and proceed with the development of Pelican Island. For approximately 50 years efforts have been made regularly to finance this development so that it might proceed. For the past 10 years, special efforts have been made to secure funds from the Federal Government. It has been possible in recent months to interest sufficient private capital to proceed with the construction of a bridge and the development of the island without any type of Federal assistance, and a contract has been entered into between the city of Galveston and Allen & Co., Estabrook & Co. and Associates, whereby these firms will provide funds necessary to construct the bridge and proceed with the development. It appears that this can all be done without request-in Federal assistance, but it cannot be done until the intracoastal canal has been moved as aforementioned.

So far as we have been able to determine, there are no reasons why the intracoastal canal should not be moved northward. Even the question of economy is answered by savings which would be effected in its removal, and by increased revenues which would result not only to the Federal Government, but to State, county and municipal governments as well.

Previous studies by the United States engineers as well as others interested have proven beyond reasonable doubt that a dangerous condition now exists in the Galveston ship channel, where gasoline, oil and other highly combustible liquids and materials are transported daily through an area teeming with activity in the way of shipping, grain elevator operations, sulfur operations, cotton warehouses and many others. The Texas City explosion in 1947 has created an acute consciousness on the part of local and Federal agencies alike of the dangers of a collision which might result in fire and explosion in this congested area. Litigation which has been occurring continuously since 1947 illustrates the extreme importance of Federal insistence that this intracoastal canal be removed, and removed immediately. A serious fire or explosion would spotlight the fact that those who could have taken corrective measures have been derelict in their duty.

Removal of the intracoastal canal will reduce the distance of travel by approximately 2½ miles, in addition to the fact that traffic in the ship channel will not then result in continued congestion which has existed and which has become steadily worse in recent years. It is impossible to make an accurate computation of the actual savings which would result from this substantial reduction in miles traveled, but it is needless to say that it would run into astonomical figures over a period of years.

The city of Galveston now holds requests and inquiries from various manufacturing, distributing, and warehousing firms who have indicated an anxiety to locate plants on or near deepwater shipping, and who have indicated their very favorable inclination to locating such plants on Pelican Island. Even a conservative estimate of the number of these plants which would so locate presents definite proof that taxable earnings would be sufficient to more than pay for the $320,000 necessary to complete this project within a very short time, and to continue not only to pay again for this cost, but to pay many times this amount over a period of years. It, therefore, becomes evident that the expenditure of this sum would result in an extremely fine investment for the Federal Government.

One of the most important reasons for taking immediate action to provide funds for the removal of the intracoastal canal is the fact that by failing to continue with this project, the Federal Government is blocking the progress of a development costing an estimated $17,800,000, to be provided 100 percent by private capital without Federal guaranties, and which would result in additional developments estimated conservatively at over $100 million, since the $17 million covers only bridge and site work, and includes absolutely no cost for plant, industrial, commercial or residential construction. Statements offered by Allen & Co., Estabrook & Co. and Associates emphasize the fact that funds are now available, and contracts have been signed to assure the immediate start of this vast development, contingent only upon the removal of the intracoastal canal, and it is the urgent request of the city of Galveston that it be allowed to proceed with its logical and proper development by the release of funds necessary to complete this removal.

GENERAL STATEMENT

Mr. HENSLEE. I will take just a moment to summarize my statement and then General Hutchins will show you some maps to indicate exactly what is involved in this particular project. My name is L. Walter Henslee.

As Senator Johnston said I am executive coordinator of the Pelican Island Development project in Galveston and I represent the city on this commission to Washington.

We have with us also Mr. Arnold of Boston who represents Esterbrook & Co. and other firms who have agreed to finance the development of Pelican Island. And Mr. Dorst, member of the citizens committee in Galveston. As has been said this project was approved by Congress after recommended approval by the United States Engineers and does not involve a very large sum of money.

REASONS FOR CANAL MOVING

The canal should be moved from its present location for reasons which have already been set out and in addition to that the new reasons which have come up are represented by the proposed industrial, commercial, and residential development of Pelican Island itself by the use of strictly private capital which runs into millions of dollars and which will make new land available for the city, will create industrial development which will produce additional income not only to the Federal Government but to the State, county, and local governments as well, and we cannot proceed with the development of this island until the Federal Government goes ahead with its project of moving the intracoastal canal or relocating the canal north of Pelican Island in accordance with the plan which has been approved by Congress.

I do hope that you will read our statements carefully and give your careful consideration to the reason which we give you and for the facts we presented in the statements. I would like for General Hutchings to take over and present the maps which show our case.

STATEMENT OF GEN. HENRY HUTCHINGS

GENERAL STATEMENT

General HUTCHINGS. Mr. Chairman and members of the committee:

I have spent my life pretty much in the Corps of Engineers, and have worked closely with quite a few of the members of your committee. I have no present connection with the Corps of Engineers, nor am I relying on my association with the corps to assist in this project.

Each of you has a small reproduction of these maps. The solid line bounds land masses. This is Galveston Island and this is Pelican Island. This is the fill that crept in around the Texas City dike. Here is the Houston ship canal. Unfortunately, here comes the present Intracoastal right through the port of Galveston.

The dotted lines on there represent the work to be done. The work to be done by private interests totals about $16 million. We are talking of only $320,000, but, gentlemen, it is the biggest $320,000 in the production of quick assets that I believe I have ever been called upon to ask the Federal Government to spend. I did so ask because it was my report that became House Document 196 of the 81st Congress, 1st session.

The land will be devoted to the uses shown on your blueprints. The thing that I desire to invite attention to is that Galveston is an east-facing port. Its jetty channel comes out here serving all these ship channels which spread out like fingers.

AUTHORIZATION

House Document 196 authorized this project at an estimated cost at that time of $320,000. That cost is conclusively covered by nothing in the world except benefits to navigation, the moneysavings to shippers and small-boat owners, and so forth. It stands on its own feet.

It happens now, lying across here, to become a necessity insofar as the construction particularly of a viaduct joining these two islands is concerned.

House Document 196 also invites attention to the fact that there is a terrific collision and fire hazard in the transportation of these vast volumes of oil through that channel, and the port of Galveston could be wiped out overnight.

Now I want to stress why we think the rerouted channel should be appropriated for at this session of Congress.

COURSE OF REROUTED CHANNEL

Senator RUSSELL. How is the rerouted channel going to run?

General HUTCHINGS. Where it now comes, the viaducts are up in here, the rail and highway viaducts. It comes through a drawbridge here and currently comes through here.

We desire to take off at about this point and continue on our way to Beaumont instead of coming right through the port.

Senator ELLENDER. Is it proposed to close the present channel?

General HUTCHINGS. Not altogether. I will cover that in a minute. There will be a viaduct across here. One of the most cogent reasons for appropriation of money for that canal—and I hope that it will be done—is that before any structure, as you know, can be built in any navigable water, the Corps of Engineers must issue a permit.

This construction will be important enough to make it necessary to provide a 30-day notice before a public hearing to permit navigation interests to come in and protest if there are any such.

The least opening that will be necessary will be for the circulation of water. The next will be small-boat navigation.

BARGE TRAFFIC

Galveston is an east-facing port, even including barge traffic. There is more than 4 million tons of barge traffic through this channel, into and out of this channel in a single year, and a negligible amount, of the order of 5,000 tons, goes westward and a like amount comes eastward into the port.

Therefore, the determination of what structure is to go there will be up to the Corps of Engineers, but obviously that canal or rather that channel can't be blocked unless a substitute channel has been provided; and you may be throwing a tremendously more expensive structure into our laps by not doing this work before the remainder of the work has been done.

Senator MCCLELLAN. I understood you to say only three-hundred-some-odd thousand is involved.

FEDERAL EXPENDITURE

General HUTCHINGS. In this. The Federal Government's expenditure in the dotted-line work only shown on that map will amount to $320,000. The private work will amount to $15 million-plus.

Senator MCCLELLAN. What is involved here is three-hundred-some-odd thousand so that the private interests can spend the other sixteen or seventeen million?

REQUEST

General HUTCHINGS. We are asking that you advance the date of providing it because it is an approved, fully justified project, which is going to be appropriated for in the early future.

We are asking that that appropriation be advanced in the eyes of the budget to this year's appropriation.

Senator ELLENDER. Is that made necessary to further develop Pelican Island as a residential district?

General HUTCHINGS. No, sir; that is needed absolutely on the basis of navigation, whether any work is done on Pelican Island or not.

But we have an opportunity by advancement of the date of appropriation of $320,000 to proceed immediately with the total of $16 million construction. I want to state rather categorically about seven reasons why we should do this.

First, it is inexpensive and tremendously important. It is already authorized in House Document 196. It is fully justified by navigation savings. It will avoid fire and collision hazards which are tremendous. It will even make a saving in the maintenance dredging of this channel

each year, which costs $250,000 a year average for maintenance dredging, by bringing this fill out with or without the navigable opening. The leakage into that channel is from here, much less will be deposited.

On top of that, there will not be the continual interference with the Corps of Engineers in the performance of their work opening up their pipelines to let the barge tows through.

COST OF CHANNEL MAINTENANCE

Senator ELLENDER. Will the Federal Government have to spend money yearly to maintain the channel?

General HUTCHINGS. Far less than they do today. It averages $250,000. They may do a million 1 year and coast for 4. The only restriction is that no Government dredging is done within 50 feet of any pier or bulkhead line because you would start caving structures owned by private interests. The shipping interests have to do their own dredging to meet your deep water, which is put in a safe location to avoid damage to their structures.

Almost every harbor has that recurring cost. I don't know of any harbor that doesn't take some maintenance dredging unless it has a rock channel.

Senator ELLENDER. When was this project authorized?

General HUTCHINGS. The 81st Congress, 1st session, House Document 196.

Senator ELLENDER. Approved by the engineers?

General HUTCHINGS. Yes. I happened to be division engineer myself at the time of the southwest division and I know the report more intimately than somebody else probably. This would permit the Corps of Engineers probably to permit a better design for all purposes through here than they otherwise would be able to permit if this channel is not dug better suiting the Federal interests and the Corps of Engineers interests as well, and it will expedite and insure about $16 million of private funds work for which you have the assurance that the money is now available.

In other words, there is no one holding off on this thing if we can get going.

INDUSTRIAL DEVELOPMENT

After development of Pelican Island—I would like to invite attention to the fact that that is not a small island. You have 1,540 acres going into residential, you have 860 acres going into industrial. This acreage will produce 5,100 lots at a cost of about $1,800 apiece. Obviously the bankers aren't going to sell them at that price, but we can produce those lots at $1,800 apiece to take care of a population of 16,000 or 17,000 people and Galveston has nowhere else to permit its growth.

Senator ELLENDER. Is it that the maintenance of the canal where it now is makes the island accessible?

General HUTCHINGS. No, sir, it is open water. There is no bridge. It is just a continuous 36-foot channel all the way through.

Senator ELLENDER. You have a causeway to reach the island from the mainland?

General HUTCHINGS. We have none now and want one. The causeway reaches the mainland from Galveston Island. This bounds

Pelican. Galveston Island connects with the mainland. There is no connection from here to here, but to carry your thought one step further, when 17,000 people begin to live on that place and these industries come in and, gentlemen, I will quote the figure because it has been given here, there is a strong opportunity to obtain $100 million of capital investment from industry on doubling the waterfront of the port of Galveston in addition to the $16 million of construction costs we are talking about.

After we get those 17¼ million, the mainland comes off up here, at that time I will make a bet that the first thing that is done will be to put a bridge across this instead of here, this is only 5-foot water, to come to the mainland and give Galveston 2 access roads instead of 1.

This thing really has ramifications that to me make it the biggest small amount of money I ever heard of in my life for Uncle Sam to get a bargain out of.

Gentlemen, that concludes my statement. I hope that among you there may be some conferees who will go to the House to talk about this because we have made no attempt to appear before the House committee.

The two committees were sitting dually and the Intracoastal Canal Association is making a full presentation to the House committee and I believe that tomorrow Mr. Dale Miller, executive vice president of the Intracoastal Canal Association does have an appointment and will discuss this merely as one feature of whatever he is asking for, which I do not know. I certainly thank you very much, sir.

It has been a great pleasure to be here.

(Mr. Hutchings' statement follows:)

My name is Henry Hutchings, Jr. I am a brigadier general, United States Army retired. I am a licensed professional engineer practicing basically in the State of Texas, maintaining my office in San Antonio. With Joseph J. Rady of Fort Worth, I am retained as consulting engineer on the Pelican Island project by the developers of this project.

I was educated at West Point and Massachusetts Institute of Technology and served in the Corps of Engineers in grades from second lieutenant to brigadier general from 1917 to 1949 when I retired.

I served in World Wars I and II, and have served in the civil works program of the corps in Galveston, New Orleans, Louisville, and Dallas. I have had direct charge for approximately 10 years of many millions of dollars of construction, including broad experience in coastal and tidal waters, particularly in the area under discussion. It is for these reasons, reinforced by my close acquaintanceship with the problems of Galveston, Tex., that I have been employed on this project.

I have been asked by my principals to give you a brief presentation of the engineering and economics of the proposed plan.

Senator KNOWLAND. Congressman Thompson.

PELICAN ISLAND

STATEMENT OF HON. CLARK THOMPSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

GENERAL STATEMENT

Mr. THOMPSON. Mr. Chairman and members of the committee, I had no intention of taking up your time but I do not believe it is quite clear just what this channel is all about. Let me refer to this map of the area.

This is Pelican Island which you see. This is Galveston. This heavy dotted line is the new channel we are talking about. At this point on the far left is Galveston causeway connecting with the mainland, which has nothing to do with the project we are talking about.

There is a lift bridge there and we have to start this discussion from this bridge. You will note that the present channel makes a crescent through the port of Galveston and joins with the Intracoastal Canal at the upper right hand point on the map.

We did not have Pelican Island in mind when we got the authorization to put the channel in to cut off that crescent. You will note that it is a perfectly straight line across Galveston Bay and is much shorter than the crescent shaped route. The engineers recommended it because of the economy which would be effected by it.

Obviously there would be less dredging of the channel if you went in a straight line.

Let me go further and take up on General Hutchings' map. We projected the development of Pelican Island here (pointing). You have to put a bridge to connect Galveston Island with this new Pelican Island development. Whenever you bridge across the Intracoastal Canal you are required to go 76 feet in the air, a costly undertaking.

In the course of a comparatively short time you are going to dig this channel anyway because it is authorized and because it is economical.

If you do it now, then we won't have to build a 76-foot high bridge across the Galveston Harbor.

It will be virtually closed as General Hutchings pointed out.

The tremendous cost of going way up in the air with that bridge, we would be relieved of, if you go ahead and appropriate the funds for the cutoff channel now.

COST OF BRIDGE

Senator KNOWLAND. What would be the estimated cost of the type of bridge there?

General HUTCHINGS. $680,000.

Mr. THOMPSON. A bridge that won't be necessary if there is the new channel.

General HUTCHINGS. That is only the bridge section. A $3.5 million causeway.

Mr. THOMPSON. $600,000 additional cost; I think it would be more than that.

CHANNEL DISTANCE

Senator MCCLELLAN. May I ask what is the distance of that canal? You have a long mark but I am of the opinion it runs across a small section.

General HUTCHINGS. Five miles.

Senator MCCLELLAN. Can you dig a——

General HUTCHINGS. Five miles, 250,000 cubic yards at 5 cents a yard. That is the only land you have.

You may be in 8 feet of water and only have to get 12.

Senator MCCLELLAN. I was thinking there is only a very small neck of land that you cross.

General HUTCHINGS. Thank you.

Mr. THOMPSON. Very small, Senator and very low lying.

Senator ELLENDER. Because this is located entirely in water won't that increase the maintenance of that channel?

Mr. THOMPSON. It is not apt to because it is a landlocked bay and there is not—of course it would be somewhat less it it was all landlocked, I mean it it was dug right through the prairie; but you have to cross the bay at one point or another.

POSITION OF ENGINEERS

Senator ELLENDER. But the Engineers take the position that it will be cheaper to maintain it at the new place than where it is now located?

Mr. THOMPSON. Yes, sir and this I think was brought out but it will not hurt to repeat it. If we virtually close this west end of Gavveston Harbor—this is the head of navigation, the head of 36-foot depth—if we virtually close it we discontinue the set of the tides and the wind and wash of the current, we no longer have as much of a maintenance problem in Galveston Harbor and have none whatever on that westward part of the Intracoastal Canal. That is what justified the authorization in the first place. It was the economical thing to do.

What we ask you to do now is appropriate and relieve us of the necessity of going up 76 feet with the bridge, let us go ahead with our private investments of some $16 million.

Thank you very much.

Senator KNOWLAND. Thank you, Congressman.

HARTWELL DAM, S. C.-GA.

Senator KNOWLAND. As a matter of courtesy to the Senators, Senator Russell and Senator George and Senator Maybank and Senator Johnston, I would like to ask them whether they would care to go on and make their statements. Because I know how busy they all are with other pressing problems.

STATEMENT OF HON. RICHARD B. RUSSELL, A UNITED STATES SENATOR FROM THE STATE OF GEORGIA

Senator RUSSELL. Mr. Chairman, I am a member of this committee and have been rather derelict in attending today. I have been out with a throat condition. I intend to stay until the presentation is made by the Citizens Committee from the area. I am sure my colleagues would appreciate hearing them now.

STATEMENT OF HON. WALTER F. GEORGE, A UNITED STATES SENATOR FROM THE STATE OF GEORGIA

Senator GEORGE. Mr. Chairman, I would like to have my colleague, Senator Russell, speak for me, in presenting this problem. The gentlemen here from the area will, of course, speak for themselves.

I want to thank you for the opportunity of identifying myself with the case as Senator Russell and the others will present it; for Senators

Maybank and Johnston from South Carolina are interested in this Hartwell project as well as we are in Georgia.

Senator KNOWLAND. I know of your great interest in the matter, and I did want to extend this opportunity to you, because you have some heavy commitments.

Senator GEORGE. I thank you very much. I have another committee meeting now, and I must go to it, but Senator Russell will speak for me, and I identify myself fully with what he and Mr. Morris and Mayor Lee Carter and others from the Hartwell area will have to say to you.

Senator KNOWLAND. While we are here representing you, you may have to represent me at this other committee meeting, if it is foreign relations.

Senator GEORGE. I think I will. I must go there now.

Senator KNOWLAND. Senator Johnston, would you care to make a statement now? Because I know that you have commitments also. I feel that that is a courtesy that should be extended to the members of the Senate.

STATEMENT OF HON. OLIN D. JOHNSTON, A UNITED STATES SENATOR FROM THE STATE OF SOUTH CAROLINA

Senator JOHNSTON. Mr. Chairman, I certainly thank you for your courtesies, but I think it would probably be better for the Citizens Committee to present their case, and then let me and the others, probably, if they want to, go ahead at that time.

I will do as they do. I am here to cooperate.

Senator MAYBANK. Mr. Chairman, we have the independent offices bill up on the floor. We have delayed voting until Wednesday. And as a member of this committee, there is nothing I have to say except what I have said in the past few years about Hartwell Dam and about the necessity for some time and so forth.

So if I might be excused, with the understanding that those who are here from Georgia understand fully the situation, then, with you being on this committee over the years, I feel that I may ask leave of absence for myself.

Senator KNOWLAND. And if any of the Senators desire to have a statement placed in the record, or a letter, that may be done.

HARTWELL DAM, S. C.-GA.

STATEMENT OF HON. RICHARD B. RUSSELL, A UNITED STATES SENATOR FROM THE STATE OF GEORGIA

PROJECT DESCRIPTION

Senator RUSSELL. Mr. Chairman, the members of this committee are not altogether unfamiliar with the Hartwell, S. C., and Ga., project. It is a multipurpose dam on the Savannah River in an area that threatens to have a great power shortage and is very near to the development of the atomic energy project below Aiken, S. C., on which the Government is to eventually spend billions of dollars.

CONSTRUCTION REQUEST

This committee received testimony in the past about this project. It has been authorized. The engineers asked for $4 million for construction.

This fiscal year they requested this money but none of it was granted by the Bureau of the Budget. We think it is a project of vital importance that the Government will be compelled to build sooner or later and the sooner it is constructed the sooner the power will be available and the water for the needs of the atomic energy plant as well as for purposes of navigation and flood control. I have a group of citizens headed by the mayor of Hartwell, Ga., Hon. Lee Carter, and Hon. L. T. Morris, who has been interested in this public project since memory of man runs not to the contrary. We have also Mr. William P. Carter of the chamber of commerce and Mr. Claud D. Stovall and Robert P. Broom. I asked Roger McWhorter, engineer of the Federal Power Commission, who is thoroughly familiar with the technical aspects of this matter, to be here prepared to answer any question any member of the committee might propose.

My colleague was here and was compelled to leave and asked me to express his great interest in this project and both of the Senators from South Carolina, Senator Maybank and Senator Johnston, are here to manifest their interest by their presence.

Senator MAYBANK. More than my presence. I voted for it several times.

Senator RUSSELL. The record is quite clear of your interest. This is a continuing manifestation, I should have said, of your interest.

Mayor Carter, you may proceed.

Senator KNOWLAND. Mr. Mayor, we are glad to have you here.

CITY OF HARTWELL, GA.

STATEMENT OF LEE P. CARTER, MAYOR

Mr. CARTER. We certainly appreciate the opportunity of being here. First I would like to call on Louis Morris who is on the Hartwell steering committee to make a statement if he would like to.

STATEMENT OF LOUIS MORRIS, HARTWELL STEERING COMMITTEE

GENERAL STATEMENT

Mr. MORRIS. I have only this to say, Mr. Carter, that we wish to express our appreciation again for having this privilege. We have been here many, many times over a period of years before you and other committees in behalf of this greatly needed project. As a member of the Hartwell Dam steering committee and being somewhat older than my distinguished colleague there, and like the distinguished Senator Russell from Georgia, I have been under the weather a bit of late. I am going to let the younger man present the case in behalf of Hartwell.

Mr. CARTER. This statement has been prepared by a group of citizens of Georgia and South Carolina who are interested in the Hartwell, Ga.-S. C., project. The purpose of this statement is to call to the attention of you gentlemen the value of this project to

not only the citizens of the Southeastern States but also to the Nation as a whole; and to request an appropriation of funds for the continued planning and construction of this project.

PROJECT AUTHORIZATION

The Hartwell project was authorized by the Flood Control Act of 1950. It is located on the Savannah River and is one of a series of 11 multipurpose projects which compose the general plan of the development of the Savannah River, and were approved in the flood control bill of 1944.

CLARK HILL DAM

The first of these projects, the Clark Hill Dam, is now nearing completion. The Hartwell project, which is the second in size of the proposed development for this river, is located 68 miles upstream of Clark Hill. For your ready reference there is attached hereto a map showing the drainage basin and the location of the Hartwell and Clark Hill projects.

PLANNING FUNDS

The planning of the Hartwell project has been initiated by the Corps of Engineers, and appropriations in the amount of approximately $750,000 have been made for this purpose. The expenditures of these funds, which have been authorized, will be completed during this fiscal year. Additional funds, therefore, must be appropriated to continue the planning and construction of the Hartwell project.

Your committee is requested to include an appropriation in the amount of $4 million for the fiscal year 1954 for this project. An appropriation in this amount will permit the starting of actual construction, and with continued appropriations the project can be completed in time to assist in alleviating power shortages in an area where defense requirements are vital.

Furthermore, the completion of the Hartwell project will permit the development of the lower river to its navigational potentialities; and in our opinion, its benefits would be available for such use as the AEC may require in connection with the development of its Savannah River plant.

Senator MAYBANK. Do you have the letter from the AEC?

Mr. CARTER. No; I think that has been filed with the committee.

Senator MAYBANK. I just wondered if you had it.

Mr. CARTER. We can get a copy of the letter.

Senator RUSSELL. Without objection the letter from the Atomic Energy Commission will be put in the record following the statement made by Mayor Carter.

REGIONAL POWER REQUIREMENTS

Mr. CARTER. During the past several years innumerable surveys and reports have been made by several governmental and independent agencies on the power requirements of this region. The area to which we refer is known as region 3 of the Federal Power Commission. In every report that has been made it has been recognized that power shortages must be anticipated in this region.

In January 1952 Progress Report No. 15, Electric Power Study by the Joint Committee on Defense Production, made the following statement:

> Your committee cannot emphasize too strongly the need for realizing the long lead time required to increase the output of electric power. In the face of past and current predictions by men competent in this field that the Nation faces a power shortage especially in the Southeast and Northwest * * *

In November 1952 further power studies were made by the Federal Power Commission to determine the market for power in region 3.

Senator MAYBANK. What report was that?

Mr. CARTER. A report by the Federal Power Commission for region 3 which we comprise as part of this study. This study reflected the supply available from Federal hydroelectric projects under construction and from utility plants which are in existence, under construction, and definitely scheduled for construction through the year 1955. Estimates of future loads were made through the year 1960.

As a result of this study, the report stated that the foreseeable supply would meet the estimated loads and provide reserve requirements through 1955. Additional supply will be required in 1956 and subsequent years.

Because of the long lead time required to increase the output of electric power, it is essential that the orderly development of the Hartwell project continue uninterrupted so that its power facilities would be available by the year 1956, which is the time that has been estimated the additional power would be required in region 3.

Senator MAYBANK. Have you got a report from the joint committee on production? The distinguished Congressman from Georgia, Mr. Brown?

Mr. CARTER. We have a statement.

ULTIMATE POWER CAPACITY

Mr. CARTER. The Hartwell project as now proposed would have an ultimate installed capacity of 300,000 kilowatts. Its energy production is estimated at 453 million kilowatt-hours per year. In addition, the energy which would be produced at Hartwell, the increased flows of the Savannah River would be so improved that the total energy from the Clark Hill project would be increased about 2 million kilowatt-hours per year. At the same time 50 million kilowatt-hours per year of secondary energy at Clark Hill will be converted into primary energy.

There is a definite tendency for large defense power and industrial loads to gravitate to this area. There are many favorable factors which influence the location of defense and other plants in this region of sufficient importance to justify the increase of power supply of this section. It is generally conceded that the region is capable of absorbing a tremendous expansion in generating capacity. The mobilization program and the relatively high level of civilian economy will result in an increasing demand in electric power in all categories of use.

DEFENSE ESTABLISHMENT

The principle defense establishment in the immediate area of the Hartwell project is the Savannah River plant of the AEC located on the Savannah River downstream of Augusta, Ga.

This plant is now nearing completion and its initial power requirements have been programed for construction so that the construction of Hartwell would not directly benefit its power requirements. If the Savannah River plant follows the pattern of other AEC installation, there can be no doubt but that there will be major expansions in the capacity of the plant during the coming years.

It is not necessary to dwell on the so-called atomic age. It will suffice to say that the requirements of atomic energy will become increasingly larger through the years, and the Government as the main supplier of this energy will be faced with continued expansions and new constructions in this field. There is no question but that any future expansion program of major significance of the Savannah River plant will be directly benefited from the availability of power from Hartwell.

REQUIREMENTS OF SAVANNAH AEC PLANT

It is our understanding the Savannah River plant of the AEC will require approximately 1,500 cubic feet per second of water in its manufacturing process. The withdrawal of this quantity of water from the Savannah River will result in the lowering of navigational depths from 1 foot to 1½ feet so that at certain reaches of the river, the authorized 7-foot depth will not be available. The completion of the Hartwell project will be required to increase the low water flows of the river to offset this reduction in depth due to the withdrawal of water by the Savannah River plant. Any future expansions of this plant will undoubtedly require an additional supply of water which without Hartwell would serve to reduce seriously the potential navigational capacity of the river.

COMPLETION TIME

The completion of the Hartwell project would require about 3 years without interruption after construction has been initiated. Unfortunately, it is not possible to wait for the development of shortages in power and water before initiating the construction of a project of the type of Hartwell. Its needs must be anticipated and construction time must be allowed prior to the development of shortages. It is therefore certainly reasonable to assume that the logical development of the Hartwell project requires continued planning and construction as quickly as possible. In order to meet anticipated demands in the year 1956 construction of the Hartwell project should be initiated in the fiscal year 1954.

AMOUNT REQUESTED

As a result of the foregoing reasons, it is respectfully requested that your committee include in its appropriations the sum of $4 million to be made available for expenditure during the coming fiscal year beginning July 1, 1953.

Senator RUSSELL. You might read the names of the committee. They will appear in the record.

Mr. CARTER. Mr. Wilton Hall, Louis Morris, L. S. Moody, Butler B. Hare, Edgar A. Brown.

Thank you, Senator. I would like to have permission to insert in the record a statement by Congressman Paul Brown.

Senator KNOWLAND. It may go in the record at this point.

(The statement referred to follows:)

STATEMENT OF CONGRESSMAN PAUL BROWN OF GEORGIA

Mr. Chairman, we are before your committee again today to talk to you about a multiple purpose reservoir project which has been so thoroughly investigated by competent authority and received such careful consideration by the Congress and has been authorized so long and has so much merit that its construction might well be nearing completion at this time rather than just approaching a large-scale beginning. I refer, of course, to the great Hartwell power and storage project on the Savannah River in Georgia and South Carolina.

In this project there is an element of value of great importance which has never been given the consideration it merits and which perhaps has never been presented clearly and fully to your committee. Entirely aside from its customary day-to-day operation for the production of power and the control of floodwaters, the dam and powerplant, backed by one of the largest reservoirs east of the Mississippi River, will be ideally adapted to emergency service at capacity operation when generating facilities in the nearby power systems or at the AEC steam-electric plants below Augusta are out of commission due to accident or for other reasons. Critical need for emergency service always arises out of such situations.

Suppose for instance that 300,000 kilowatts of steam-electric capacity at the Savannah River plant of AEC should be put out of service suddenly by an unexpected accident or by an act of providence. Assuming adequate transmission interconnection, the Hartwell powerplant could immediately pick up that entire load and operate to its ultimate capacity of 300,000 kilowatts and carry the load for many hours or even days until the damaged generating facilities are restored to service. You will observe that in this discussion I am treating the AEC load as the most important in the region and assuming that it would be in a priority status.

In a letter addressed to Hon. Clarence Cannon, chairman of the Committee on Appropriations, in December 1952, Hon. Gordon Dean, Chairman of the Atomic Energy Commission, stated among other things that the Savannah River plant, as presently planned or as expanded in the future, would be beneficially affected by any lowering of the average temperature of water in the Savannah River, but he further stated that sufficient factual data are not presently available to determine with any certainty the amount of temperature reduction which can be expected from construction of the Hartwell project.

He further indicated that the Savannah River plant would receive further direct benefits in the event of any future expansion program.

In ordinary peacetime operations, large generating units sometimes cease operation suddenly and unexpectedly and if emergency service is not available, industries, commercial establishments, and residential consumers are handicapped until electric service is restored. It is in situations of this kind that a hydroelectric installation backed by an enormous quantity of stored water is of great value. The Hartwell project is ideally adapted to such emergency service.

The special value of storage hydroelectric developments is fully recognized by the electric utility industry, this being evidenced by the existence in various parts of the country of large reservoirs constructed by both privately owned and non-Federal public electric utilities.

The Hartwell Reservoir, for instance, will be so large that even if it were possible suddenly to shut off the entire flow of the Savannah River at the head of the reservoir, the power plant could operate 48 hours, say, at its full ultimate capacity of 300,000 kilowatts and the reservoir would hardly be drawn down more than a couple of feet. Power developments of this type and magnitude are rare, not many power systems being so fortunate as to have one of them. A comparable example is the Fontana development on the Little Tennessee River in western North Carolina—a bulwark to the TVA system.

I desire, Mr. Chairman, to bring to the attention of your committee a very important matter which I simply do not believe has ever received proper consideration. It is inconceivable that any informed person, whether engineer, industrialist, Government official or legislator, would not recognize this important element of value which would mean much to a large section of the Nation.

The Hartwell project in its proper role as a part of a large regional power system operating as an integrated whole, regardless of ownership, is like a well-charged storage battery standing ready for extraordinary service at any moment. A run-of-river hydroelectric plant, i. e., a plant not backed by a large storage reservoir cannot render such service.

I turn now, Mr. Chairman, to other facts which commend the Hartwell project to the favorable consideration of your committee and the Congress. The general

plan adopted by the Congress for development of the Savannah River Basin includes 11 water-control projects of which Hartwell and Clark Hill are the largest and by far the most important. These two projects, one of which is substantially completed, are properly termed the key projects of the general plan. Without them the valuable water resources of the basin could never be comprehensively developed in a manner best to serve the public interest. In the future the other 9 projects will be built around these 2 great storage projects, possibly by private interests.

Hartwell might quite properly be referred to as a leverage project because it will be a very important headwater improvement valuable to all downstream hydroelectric plants on the main stem of the river. The use of its large storage capacity will regulate the widely-varying flow of the river and tend to make it more nearly uniform, and this flow regulation will be effective not only at the Hartwell site but also at the existing Clark Hill powerplant and the plants yet to be constructed. Two additional rather large unconstructed projects ,namely, Middleton Shoals and Goat Island, lie between Hartwell and Clark Hill, and they are certain to be constructed at sometime in the future, probably in the not distant future. These future developments, like Clark Hill, will benefit substantially from the Hartwell flow regulation for nothing is more valuable to a hydroelectric plant than to have a well regulated flow passing through its turbines.

Fortunately in authorizing the construction of the Hartwell project, Congress acted only after a thorough investigation by competent authority, and with the best advice available. The initial and ultimate power installations will be 180,000 kilowatts and 300,000 kilowatts, respectively, and it has been estimated that the average annual energy output will approximate 460 million kilowatt-hours; and in addition to this at-site energy there will be the increased output at each of the downstream plants.

The high benefit-cost ratio of this project as estimated and reported to you by the Corps of Engineers is convincing evidence that Hartwell is a highly desirable project, one which will be a prime investment for the public. I realize, however, that the merits of this project are already well known to you. You know that it will be worth every dollar invested in it and more.

Now, Mr. Chairman, I should like to say a word about the need for the power to be produced at Hartwell and the incremental power at the benefited downstream powerplants. This subject has been considered thoroughly by all agencies of the Federal Government directly concerned with the development of water resources—the Federal Power Commission, the Corps of Engineers, and the Department of the Interior—and without exception the conclusion has been that the power will be needed as soon as it can be made available. It is expected that the Hartwell power output will be absorbed as fast as the turbines can be installed to produce it. As indicated by the cost of power from alternative sources, namely, steam-electric plants, the value of the Hartwell power will be such as definitely to assure recovery of the Federal investment in a reasonable period of time.

Of the total benefits to be obtained from this project, the power component thereof admittedly looms large but nevertheless the flood-control benefits are of truly great importance. The Corps of Engineers has estimated the average annual flood-control benefits at $2,220,000. The estimate of flood-control benefits was based principally upon a survey made for the Corps of Engineers by the Soil Conservation Service covering 200,000 acres of fertile bottom lands lying along the river between Augusta and Savannah which would be benefited by the flood protection afforded by the Hartwell Reservoir. It will be immediately obvious to you and your colleagues, Mr. Chairman, that the reclamation of 200,000 acres of the richest lands in that region would greatly improve the agricultural economy of Georgia and South Carolina.

F nally, I desire to invite your attention to the navigation benefits to be derived from this project. The Hartwell flow regulation will have the effect of increasing the minimum navigable depths of the Savannah River below Augusta by about 1 foot; i. e., from the present 7 feet to 8 feet, thus providing a navigation channel capable of accommodating relatively large-scale waterborne tonnage. I hardly need to remind you that water transportation is a matter of great importance to any center of population. In order to appreciate the validity of this statement we need only to take a look at the largest and most prosperous cities of the United States, nearly all of which have had the benefit of water transportation. The fact that all of our 20 largest cities are situated on navigable waters is not without significance.

Mr. Chairman and gentlemen of the committee, let me repeat and stress again that the Hartwell project is the logical choice for the next reservoir to be con-

structed in the Savannah River Basin. Power developed by the Hartwell project is urgently needed for the rapidly expanding industries in the Southeast. Recent surveys of the Federal Power Commission and the Southeastern Power Administration indicated that the normal power requirements in North Carolina, South Carolina, and Georgia during the next decade will greatly exceed the supply of power unless additional plants are built (hydroelectric and steam-electric). The need will be even greater because of the additional load placed upon industry in the mobilization effort, particularly as the Atomic Energy Commission plant along the Savannah River is being built in the same general area. The Hartwell project with an installed capacity of approximately 180,000 kilowatts and an ultimate installation of 300,000 kilowatts will help meet this critical power demand by producing an average of about 453 million kilowatt-hours a year.

The net benefits from Hartwell power alone are estimated to be $5,268,000 a year for the initial installation and $7,815,000 for the ultimate installation.

In addition, Hartwell will improve power generation at the Clark Hill Reservoir by storing the flood flows and releasing more water during low flow periods. This will benefit the Clark Hill project by increasing the prime capacity and by converting annually a large amount of energy from secondary to prime energy, thereby increasing the annual power value by about $560,000. Also the operation of the Hartwell project will assure a depth of 8 feet all year round in the present river channel between Savannah and Augusta, an increase of about 1 foot over that which can be assured by Clark Hill alone. Thus the increased flow from Hartwell in low flow seasons will reduce the cost of providing a 9-foot navigation project to Augusta, recently authorized by Congress, and the annual maintenance will also be reduced.

Mr. Chairman and gentlemen, we have in the Hartwell project a very clear-cut case. Delay in providing for its construction can only react to the detriment of the country. It ranks among the most desirable water-control projects considered by the Congress in recent years. Let us get along with the construction of the dam and powerplant and thus make available the flood-control, power, and navigation benefits which are so badly needed in that region.

Mr. CARTER. I also would like to put in a statement by Hon. Carl Vinson of the House Committee on Armed Services.

Senator KNOWLAND. That will go in at this point.

(The statement referred to follows:)

Senator WILLIAM F. KNOWLAND,
Chairman, Subcommittee, Army Civil Functions,
Committee on Appropriations, United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: I am writing to ask your favorable action in making an appropriation for the completion of the planning and to start construction work on the Hartwell Reservoir project on the Savannah River, which is situated about 60 miles upstream from the Clark Hill Dam.

Prior to the redistricting of my State in 1932 and for more than 18 years I had the privilege and honor of representing the 10th Congressional District in the House of Representatives, and I have an intimate and first-hand knowledge of the Savannah River.

As you know, the Hartwell project is situated in the headwaters area of the Savannah River and is the second of a series of 11 such developments proposed and approved by Congress for this important southern river. The first of these Clark Hill, is now practically completed.

The headquarters of the Savannah River has been termed one of the country's greatest natural resources, and its full development will fulfill the dreams of a progressive group of Georgians and South Carolinians, who have not only dreamed about this project, but have worked for it for many years, and who are interested in its completion because of what it will mean to the public welfare of a fast growing section of our Nation.

As an indication of the possibilities of this river I quote the following from page 31 of House Document No. 64, 74th Congress, 1st session:

"In the upper section of the basin, the influence of altitude on rainfall is very pronounced, the remarkably heavy rainfall of the mountain section not being exceeded anywhere in the United States except on the northern Pacific coast. * * * The mean annual precipitation varies from 82.15 inches at Highlands, N. C., to a low of 43.03 inches at Lisbon, Ga., at the mouth of Broad River. It then increases, as the coast is approached, to 48.36 inches at Savannah. The greatest

annual precipitation, 113.85 inches, occurred at Rock House, N. C., in 1906. This same station recorded a low of 50.69 inches in 1925."

This is a tremendous volume of water that is not now being utilized to its full advantage, and the plan which has heretofore been approved by Congress provides for the regulation of this enormous rainfall so that it will conserve the resourses of the area in a way that will be extremely beneficial to the people in a large area of our country.

I am particularly interested in this project because of its possibilities and from the standpoint of our National Defense, although very little, if any, doubt exists as to the capacity of our civilian economy to use the additional power that the Hartwell project will generate.

Studies by the Federal Power Commission have shown that this power will be readily absorbed by the time it is placed on the market.

From the national defense standpoint an investment in this dam is justified, I think, for the following reasons:

(1) It is not an isolated facility, but it is part of an integrated plan of development wherein power will be supplied by more than 1 installation, thus decentralizing the responsibility by 1 unit alone.

(2) It is situated in an area which played an important part in the defense program in the last war, especially in the production of light metals, castings, textiles, chemicals, as well as large-scale fabricating and assembly operations.

(3) The Hartwell project, as I have stated, is situated on the same waters which go to form the Savannah River, where, as you know, the Atomic Energy Commission recently established its multimillion dollar installation. This plant, as the crow flies, is about 100 miles from the Hartwell site.

The genius of America consists of expansion and growth, and none of us can visualize the possibilities of the atomic age. In this connection I think it is reasonable to assume that the resources of the Hartwell plant will be called upon in the event major expansions occur in the Savannah River operations plant of the Atomic Energy Commission.

We must keep our defense lines strong and essential to defense is rapid mobilization. Electrical production cannot be mobilized quickly. It requires time to build a plant of the size of Hartwell and get it into production. The time, therefore, to mobilize this resource is now. Present civilian needs justify the Hartwell project and military considerations make it important.

Our war experience has demonstrated the unprecedented loads that can be put on our power generating plants, even with such planning and forethought as we were able to muster before the war occurred.

In view of the merits of the Hartwell project, I respectfully request that your committee grant the appropriation in the amount requested.

Yours respectfully,

CARL VINSON,
Member of Congress.

ADDITIONAL STATEMENTS

Mr. CARTER. I would like to put in a statement by Congressman Rivers and a statement by Congressman Dorn of South Carolina and a newspaper item also, showing the threatened lack of power. The article is by J. B. Harris; it is from Greenwood's Lack of Power Threatens New Industry.

Here is another article by Mr. James Self, who is the largest employer in the Third Congressional District of South Carolina. I just want to read two paragraphs, James J. Self speaking to a board of directors meeting of Greenwood Chamber of Commerce last night again pointed up the power scarcity. The Greenwood Mills official said that if his organization's Durst plant, now under construction, were to open today there would not be enough power to operate it.

I would like to get that article in in its entirety.

Senator KNOWLAND. That will go in.

(The articles referred to follow:)

AT GREENWOOD—SELF POINTS OUT POWER SCARCITY

(By Hoke Smith May)

GREENWOOD, May 12.—Another noted industrialist here has added his voice to the growing warning of a power shortage in this area.

James C. Self, Jr., speaking to a board of directors meeting of the Greenwood Chamber of Commerce last night, again pointed up the power scarcity.

The Greenwood Mills official said that if his organization's Durst plant, now under construction, were to open today, there would not be enough power to operate it.

He added that the only way the new mill could be operated now would be to draw on the power now being used in the company's other plants.

Another Greenwood Mills officer, J. B. Harris, delivered a similar warning to the chamber's board last month.

At the same time, chamber leaders heard W. R. Wise, superintendent for the commissioners of public works, tell them that a water shortage exists in Greenwood, but only for prospective industries using a large amount of water.

Wise said there is no immediate shortage of water for municipal needs. He pointed out that the local filter plant has a firm capacity of 4 million of water a day while the peak load for Greenwood last year was only 3 million in a single day.

The public works official suggested that prospective industries using large amounts of water should locate their plants near Lake Greenwood rather than have water brought to the city.

In other action the directors endorsed a strengthening of the Taft-Hartley labor law and advocated giving individual States more control over strikes.

Board chairman M. G. McDonald was asked to write members of the South Carolina congressional delegation asking the lawmakers support for the Taft-Hartley law.—Anderson (S. C.) Independent.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee, Army Civil Functions,
Committee on Appropriations, United States Senate,
Washington, D. C.

DEAR SENATOR KNOWLAND: With your permission I should like to file this letter with your committee reiterating my vital interest in an appropriation for planning and construction work on the Hartwell multipurpose project which, as you know, is situated on the Savannah River and which is in the congressional districts represented by my good friend Congressman Paul Brown, of Georgia, and myself.

The Savannah River forms the boundary between the States of South Carolina and Georgia, and is 314 miles in length. The headwaters area is on the southern slope of the Blue Ridge Mountains in northeastern Georgia and southwestern North Carolina and the watershed has a total area of 10,579 square miles. It is one of the most important streams entering the Atlantic Ocean from the South Atlantic States, and the Hartwell site is one of the best undeveloped sites for power, navigation, flood control, recreation, and general water regulation purposes in the United States.

The economy of my section is based, by and large, on industry and agriculture. In the State of South Carolina there has been a substantial industrial growth during the past few years and our industrial growth in the future cannot continue unless more power is made available.

Only a few weeks ago one of the most prominent and substantial industrialists of the South, a prominent and highly respected citizen of my home city of Greenwood, S. C., made a public address before the chamber of commerce of that city in which he stated that Greenwood County, S. C., a county that is within 50 miles of the Hartwell site, is standing "on the verge of serious electric power shortage."

Mr. Harris is vice president of the largest industrial enterprise in my district, a company that provides employment for several thousand persons, and in his speech he made the startling statement that "there is not enough power in Greenwood now to start operations at his organization's Durst plant, which is now under construction."

This is a statement by one of the most conservative and responsible manufacturers in the South. I am attaching to this letter a reprint of a news article which appeared in the Anderson, S. C., Independent, entitled, "Lack of Power Threatens New Industry in Greenwood County," which was based on Mr. Harris' speech.

The need for more power in this area for civilian requirements is pronounced and on this basis alone the Hartwell Dam can be justified.

The huge Savannah River plant of the Atomic Energy Commission is located only about 100 miles from the Hartwell site, and if a large expansion takes place there, which is within the realm of a possibility there is every reason, I think, to believe that the Hartwell Dam would be useful and needed in such an expansion program, not only as a source of additional power, but from the standpoint of better regulated flow of water for this plant, which, without any expansion,will use about 1 billion gallons of water per day, and any effect that Hartwell would have on lowering the temperature of the water would be beneficial to the plant and make its cost of operation more economical and result in that much saving to the taxpayer of the country.

As someone recently said "we cannot afford military weakness" and in my opinion this project can be justified on the basis of its possible need for defense purposes. The site of this dam is in an area where large defense manufacturing would take place if we should become involved in another war.

Our agricultural economy has suffered heavily for a long number of years from the ravages of soil erosion, so much so that the Soil Conservation Service has recently made an extensive and thorough survey of the Savannah River watershed in which a program for runoff and water flow retardation and soil erosion prevention is recommended, and in this program the Hartwell Dam would be of far reaching value to the agriculture of my section.

During the current month one of the large and successful farmers of California revisited his native home in Piedmont, S. C., and he reminded the farmers and businessmen of the Hartwell area that they should begin to make plans for irrigating their crops. He pointed out that "in 1952 40 percent of the total cotton produced in the United States was grown under irrigation," and he referred to the fact that the Hartwell Dam could be of great and permanent value to our future agriculture program by assuring adequate water conservation.

There are other features of the Hartwell project which I think are important including flood control, navigation and recreation.

In view of the foregoing and on the basis of the favorable reports of the Corps of Engineers, the President's Special Board on the Savannah River and the Federal Power Commission, I earnestly hope you will give prompt consideration to the request for this meritorious project which, as the studies show, will produce sufficient return on the investment to liquidate its cost.

Respectfully submitted.

W. J. BRYAN DORN, *Member of Congress.*

MAY 18, 1953.

Senator WILLIAM F. KNOWLAND,
Chairman, Subcommittee, Army Civil Functions,
Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: It is my understanding that you have under consideration a request for an appropriation to complete the planning and to start construction work on the Hartwell multiple-purpose project on the Savannah River in Georgia-South Carolina.

As you know, I am the Representative from the First District of the State of South Carolina, and four counties of my district border on the Savannah River, which is the boundary line between Georgia and South Carolina, and I wish to respectfully request you to make an appropriation so that the planning work may be completed and construction initiated on Hartwell as promptly as practicable. This dam is part of a large-scale plan approved by the Flood Control Act of 1944 to harness the headwaters of this river to the advantage of the Southeast and our Nation.

The first dam constructed under this large-scale, comprehensive-basin plan is the Clark Hill Reservoir and generating plant which is a navigation, flood control, power and recreation project, which is now nearing completion. This dam, in conjunction with the Hartwell project, will make available for agricultural production, in the Savannah River Basin below Augusta, approximately 200,000 acres of rich bottom lands, which, for many years, have been subject to devastating floods. This soil is readily adaptable to both grazing and general crops which can be grown in our section, and, according to a report by the United States Soil Conservation Service, under date of February 21, 1946, would mean an addition

of millions of dollars to the wealth of the States of Georgia and South Carolina, and this would be of untold benefit not to one group or class alone but to all the people living in this area.

CHANNEL

A second material benefit of the joint operations of these 2 great dams is the enabling of a 9-foot channel between Augusta and Savannah, Ga. A survey conducted by local interests, which took over 2 years to complete and which was most carefully and analytically compiled, showed that a traffic potential of about 1,300,000 tons of bulk products annually could be expected to move up and down the river if the channel were maintained in a dependable navigable condition.

The first essential to be a good channel is sufficient depth and the volume of water entering the waterway can be so controlled through the operations of the Clark Hill and Hartwell Dams that an adequate channel can be maintained without serious variations.

A dependable, year-round, navigable channel on the Savannah River assumes even more serious importance because of the recent location of the huge plant of the Atomic Energy Commission on the northern bank of the Savannah River about 20 miles below Augusta. When the traffic survey aforementioned was undertaken, no one had the remotest idea that such a vast project would be located on this river. This project simply compounds the traffic possibilities as it gives the plant access to ports on the Atlantic Ocean in the shipping of large bulk cargoes. Naturally, I cannot make any predictions as to when any such movements of freight would materialize, but I am sure you will agree with me that it is reasonable to conjecture that the location of this mammoth Government plant is favorable to cargo breakage at the ocean terminal at Savannah, Ga., and barge movement upstream to the plant, where loading and unloading dock facilities have already been built.

The Savannah River area is growing industrially and I think it is safe to say that as further industrial expansion occurs the river will be used more extensively than ever before.

POWER

The Hartwell project will have an ultimate installed capacity of 300,000 kilowatts. In this connection I should like to say that the manufacturing output of South Carolina, measured in sales dollars has trebled since 1939, and Georgia, North Carolina, and Tennessee, all of which are within our general power area, have more than doubled their manufacturing production since that time. Industrial and commercial power demands have, therefore, greatly multiplied.

The farm income in South Carolina alone has risen from $116 million in 1940 to $384 million in 1951. The growth is directly related to the consumption of electric power, and it is no wonder that the Federal Power Commission predicts by 1954 additional generating capacity will be required to meet the increasing, if not voracious, power appetite of this region. To me there is no doubt that production of power from the Hartwell project will be readily and promptly absorbed by our fast growing area.

I shall not attempt to dwell on the importance of additional power resources to take care of possible plant expansions in connection with the Savannah River plant of the Atomic Energy Commission on the Savannah River, but it certainly appears to me that as a safeguard the Hartwell project very definitely should be given a large place in the defense picture, and I sincerely and earnestly hope that you will grant an appropriation so that work on this important project may be started during the forthcoming fiscal year.

Respectfully submitted.

L. MENDEL RIVERS,
Member of Congress, First District of South Carolina.

[Anderson (S. C.) Independent, April 16, 1953]

J. B. HARRIS SAYS:

LACK OF POWER THREATENS NEW INDUSTRY IN GREENWOOD

GREENWOOD, April 15.—A top Greenwood industrialist has predicted that this thriving textile city is on the verge of a serious electric-power shortage.

J. B. Harris, vice president of Greenwood Mills, told directors of the chamber of commerce last night that there is not enough power in Greenwood now to start operations at his organization's Durst plant, which is now under construction.

The directors meeting heard statements from leading industrialists and businessmen that an acute shortage of water and power are the chief stumbling blocks to location of new industries here.

Harris pointed out that, if Greenwood had an adequate raw-water supply, a finishing plant already would have been established near the city.

R. E. Froneberger, Greenwood city manager, said there are no adequate facilities for raw water in Greenwood at the present time despite the fact that Lake Greenwood is little more than 10 miles from the city limits.

A move on the part of the Federal Government to build a power line into Greenwood from the Clark Hill Dam has been blocked by court action. However, the Greenwood Power Commission has announced plans to build its own line since the Southeastern Power Administration project has been stalled.

Senator MAYBANK. Also I would like to make some statements as a member of the committee. Mr. Wilton Hall called me this morning and called my colleague, Senator Olin Johnston, who is here with us and said he was sorry he could not be here because of sickness.

But he thoroughly agrees and subscribed to what you have said in the rightness of this appraisal.

At this time I would like for Mr. Roger McWhorter, Chief Engineer of the Federal Power Commission, to make his statement.

Senator KNOWLAND. Very well.

FEDERAL POWER COMMISSION

STATEMENT OF ROGER B. McWHORTER, CHIEF ENGINEER

GENERAL STATEMENT

Mr. MCWHORTER. Mr. Chairman and gentlemen of the committee, my statement is in printed form and I can insert it in the record.

My name is Roger McWhorter, Chief Engineer of the Federal Power Commission, authorized to come before you today by the Chairman of that Commission, Chairman Kuykendahl.

I could read my statement, Mr. Chairman. It would probably take about 7 minutes.

Senator KNOWLAND. It can be put in the record. If you care to summarize it you may do that or you may read it into the record in full but I would think that if you could comment on your statement, summarize it, that would take care of the matter.

Mr. MCWHORTER. I will summarize it.

PROJECT AUTHORIZATION

First, this is an authorized project, authorized by the Congress on the basis of its merits. It is a thoroughly sound project. Next the dam creates a very large reservoir, one of the very largest in the eastern part of the United States with capacities up to the surcharge level of about three and a half million acre-feet.

TOTAL COST

Senator KNOWLAND. What is the total cost?

Mr. MCWHORTER. About $86,200,000. It is not only a large reservoir but a larger power installation also. The initial installation will be 180,000 kilowatts, ultimate installation 300,000 kilowatts.

It is a type of project that is especially valuable in any power system because it is a peaking-type project by which I mean that the powerload varies throughout the day and it is necessary to have enough power installation to carry the largest load you have at any time during the day or any time during the year. This type of project known as a peaking-type project can have a large installation and with its large reservoir behind the dam can pick up a load, an additional load equal to its entire power installation at any time and on a matter of minutes' notice or even less than that.

Senator ELLENDER. Is the ultimate power production you referred to a moment ago included in the cost that you have just mentioned of $90 million?

Mr. MCWHORTER. The initial installation of 180,000 is included in the $90 million estimate.

Senator ELLENDER. What will it cost to have its ultimate production?

Mr. MCWHORTER. That would be just the incremental cost of adding the additional units which would be relatively small.

Senator ELLENDER. Generating units?

Mr. MCWHORTER. Yes.

Senator MAYBANK. This river starts in North Carolina?

Mr. MCWHORTER. Yes.

Senator MAYBANK. The Army engineers' report comes all the way from Tocksway Lake.

Mr. MCWHORTER. Yes.

Senator MAYBANK. Which washed out in the flood. That is where it starts with that big drop. Then it goes down to Georgia.

Mr. MCWHORTER. The Tutlow River joins and makes the Savannah.

Senator MAYBANK. I have walked the road. I just wanted to make sure.

Mr. MCWHORTER I have walked it, too. As to the kind of project that the United States should build——

RECOMMENDATION OF ENGINEERS

Senator MAYBANK. Not being facetious, the Army engineers 'way back recommended that this should be started from the dam coming down to Hartwell and down to Clark Hill; am I right?

Mr. MCWHORTER. Yes. We have a project there and the Federal Power Commission recommended that 1 or 2 small projects be added at the very head of the basin because the rainfall is extremely heavy.

Senator MAYBANK. That is where they had the first navigation in Georgia and Carolina.

Mr. MCWHORTER. Yes. Now as to the type of project that we should build——

Senator MAYBANK. The Army engineers recommended it and the Federal Power Commission concurred.

Mr. MCWHORTER. The Federal Power Commission concurred fully in the recommendation of the Army engineers for the adoption of general development consisting of 11 projects and this Hartwell project is one of the key projects, or perhaps it is the key. Clark Hill is the other one.

OTHER KEY PROJECTS

Senator MAYBANK. What other key projects do you have between Clark Hill and Hartwell?

Mr. MCWHORTER. I consider that there are only 2 key projects in the basin and by that I mean you could not possibly develop the resources of that basin in the public interest without building those 2 projects.

You have to have those two and all the others are built around them. Coming back for a moment to the type of project that the United States should build, with certain other projects being very properly built by private enterprise——

BACKGROUND OF WITNESS

Senator MAYBANK. Senator Russell and I know well who you are but you should say you have been chief engineer of the FPC how long?

Mr. MCWHORTER. I came there 22 years ago.

Senator MAYBANK. What did you do before that?

Mr. MCWHORTER. I was with the Army engineers for many years over a period of 22 years, but I was out of the service a couple of times as a consultant to the city of New Orleans a couple of years and the other—the Orleans Levee District and on the flood-control work in the Miami district in Ohio for 4 years.

STATEMENT BY SECRETARY OF THE INTERIOR

Mr. Chairman and gentlemen, just a few days ago on May 5 the distinguished Secretary of the Interior made a statement regarding the type of dams which should be built by the United States and the kind that should be built by private interests. Briefly stated he said that large multiple-purpose dams on the main stems of these great rivers, dams of a type that private enterprise could hardly be expected to build, but still dams of a kind that must be built in order to develop our resources for the benefit of the public, that that type of project should be constructed by the United States. I am thoroughly in agreement with his position. Hon. Douglas McKay, Secretary of the Interior stated that. He did not mention any dam by name but if he had been talking about the Hartwell Dam he would have just said exactly that.

MULTIPURPOSE DAM

Examining that situation we find that the Hartwell Dam is a very large multipurpose dam for flood control, navigation, power development, and other beneficial public use; it is on the main stem of one of the most important rivers in the southeastern United States. That is a project without which the resources of that basin could never be developed properly in the public interest. It fits right into the category of the projects about which the Secretary of the Interior so correctly said should and must be built by the United States.

Passing on to the economics of the project: The project report gotten out by the Army engineers made public just a few months ago shows the benefit cost ratio as 1.48 to 1, approximately 1.5 to 1.

BENEFIT COST RATIO

You will probably observe that is a smaller benefit cost ratio than the Army engineers formerly showed for this project, smaller than General Chorpening gave when you had him before you a couple of years ago.

At that time it was over 2 to 1, I would like to explain the reason for that.

The present benefit cost ratio of about 1.5 to 1 does not reflect the value of the flood control afforded by this project to about 200,000 acres of the most fertile lands in that river basin lying along the Savannah River between Austin and Savannah.

It will be obvious at once that the bringing into agricultural use of 200,000 acres of the most fertile land in two States would very greatly enhance, would have very great value, and greatly bolster the economic stabilization of those two States.

Senator ELLENDER. Won't the assurance of a steady flow of water also improve conditions for the great atomic energy plant?

Mr. MCWHORTER. Yes; I thought I might mention that.

Admittedly the addition of this stored water which is quite cool, especially toward the bottom of the reservoir will lower the temperature of the water used by the atomic energy plant and it is recognized by all that that will be highly beneficial.

Senator MAYBANK. The Atomic Energy said so.

Mr. MCWHORTER. Yes.

Senator MAYBANK. The AEC wrote letters saying this would cool the water in the Savannah River and would provide water.

VALUE OF STORAGE PROJECT

Mr. MCWHORTER. That is true. In its natural condition the flow of the Savannah River sometimes dropped down so low that you could not have possibly had an atomic energy project there without these storage projects. So it has beneficial effect to the AEC in that way but it is beneficial in another way. As I said a moment ago the ultimate installation will be 300,000 kilowatts. It will have a very large reservoir. Suppose on any day because of an accident, an act of Providence, 2 or 3 of those very large steam electric units at the atomic energy plant go out of commission very suddenly?

Senator MAYBANK. Let me add this. The private power companies of the area have the right to sell most of the power in the atomic energy area in the Savannah Valley.

Mr. MCWHORTER. Yes. I believe the Commission is building some plants too.

Senator MAYBANK. I meant the town of Aiken with its enlargement is served by private power. The town of Aiken is served by the private power companies.

Mr. MCWHORTER. The Savannah Basin.

Senator MAYBANK. I am talking about the town of Aiken, the whole basin is served by private power companies?

Mr. MCWHORTER. Yes. The point I make is that regardless of whether these generating units that serve the atomic energy plants are owned by private interests or by the Federal Government as power units of the AEC plant the situation would be just the same as to the value of the Hartwell installation in bolstering and backing up those power units.

Suppose two 150,000-kilowatt units went out of commission, to make up a total of 300,000, went out of commission, the Hartwell project could pick it up just like that, right away, just as soon as it goes off up there, with sufficient interconnection the Hartwell project could pick up that entire 300,000 kilowatts and that being a priority load, the most important loads in the region, that is exactly what would be done.

Senator JOHNSTON. Is it not true in considering the Hartwell Dam, which is 68 miles above the Clark Hill project, that by holding this water back and allowing it to come in gradually, as needed, would also be of great benefit in times of low water? We do experience low water in that stream at times.

Mr. MCWHORTER. Right.

INCREASE IN POWER

Senator JOHNSTON. Isn't it also true that the Clark Hill development, on which we have already expended millions of dollars would, by building the Hartwell Dam, be able to increase its capacity of the generating kilowatt-hours to about 50 million kilowatts a year?

Mr. MCWHORTER. Yes, about 52 million in all but it would convert 50 million kilowatt-hours of secondary energy at Clark Hill into primary power and primary power is much more valuable than the secondary power that was converted.

I would say once the construction started perhaps it would take 4 years to complete this project. I believe the Army Engineers do or could do it quicker than that if they got the appropriations as they needed them to rush the project. Ordinarily appropriations are not made that way so I would say that even though construction, if construction is started in January of next year, by that time, then it would be about 1958 before this power would be available.

By that time the power requirements in that region would exceed the power supply according to the estimates of the regional engineer of the Federal Power Commission at Atlanta by 558,000 kilowatts and the Hartwell project could supply only a minor part of that. So it is perfectly obvious that there is no question in the world about the need for this power.

AREA TO BE FLOODED

Senator MAYBANK. I have no people opposed to this project except a few I would naturally assume would be opposed to any project. How much land is Hartwell going to flood?

Mr. MCWHORTER. At the maximum power pool elevation 56,000, 56,400 acres.

Senator MAYBANK. How much land would be in Georgia and how much in South Carolina?

Mr. MCWHORTER. I believe the Army engineers would have to give you those figures.

Colonel PAULES. I would have to furnish that for the record.

Senator KNOWLAND. Please do so.

(The statement referred to follows:)

The total area of Clark Hill Reservoir at the top of the power pool is 70,000 acres. Of this amount 47,800 acres are in Georgia and 22,200 are in South Carolina. The area at the top of the power pool in the Hartwell Reservoir is 56,400 acres, of which 37,200 acres are in Georgia and 19,200 acres are in South Carolina.

Senator MAYBANK. Do you know the proportion?

Mr. PAULES. About half and half.

Mr. MCWHORTER. The Hartwell project is a headwater benefit to headwater improvement to all projects below it. Clark Hill is not the only one. In between Clark Hill and Hartwell there are sites for two other good projects, one is quite a good-sized project.

Senator MAYBANK. What I was trying to find out is the land flooded in the Carolinas. Do you know the land flooded in both States by Clark Hill? I can remember well when the head of the Georgia Power Co. got me interested in Clark Hill.

Mr. MCWHORTER. I believe that one company which formerly had a license for a small project there owned about 40,000 acres.

Senator MAYBANK. I understand that but I think most of the land is in Georgia that is flooded.

Mr. MCWHORTER. Of course, it floods on both sides.

Senator MAYBANK. I want the acreage straight because I get so many letters.

Mr. MCWHORTER. You want the relative amounts of land flooded for both Hartwell and Clark Hill in South Carolina and Georgia?

Mr. PAULES. I do not have the breakdown of the States. It looks as if there may be a little more land in Georgia.

Senator MAYBANK. There is nothing divided—nothing divides us save the river.

PRELIMINARY WORK ACCOMPLISHED

Mr. MCWHORTER. I have only one other thing to say. That is that this is not a project you are considering whether or not it should be built. It is one that Congress has already determined and as I say that was determined on the merits of the project. Now in view of the fact that Congress has already appropriated several hundred thousand dollars that has been used for primary or preliminary work on this project to bring it up to the point where it can be started and with the further very definite prediction that before this project can be completed there will be demand for very much more power than this, it would seem desirable to proceed with the construction just as soon as possible. The Congress could not possibly make any mistake in appropriating the $4 million asked for, but at the very minimum enough should be appropriated to build the access highway and railways and do the clearing and do some necessary work on both sides or the river where the earth dikes would go out from the ends of the concrete dam to higher ground so that the project would be ready to go ahead on a large scale as soon as more adequate appropriations are made.

I bring that to your attention because of the great importance of providing this power supply in the region and of constructing a project of the exact type that ought to be constructed by the United States and one which the Congress has foreseen and has provided its construction.

Thank you.

Senator KNOWLAND. Thank you. Your statement will be printed in the record.

(The statement referred to follows:)

STATEMENT OF ROGER B. MCWHORTER, CHIEF ENGINEER, FEDERAL POWER COMMISSION, RELATIVE TO THE HARTWELL RESERVOIR PROJECT ON THE SAVANNAH RIVER, GA.-S. C.

Mr. Chairman and other gentlemen of the committee, the authorized Hartwell Dam project is one of the two very large projects included in the comprehensive 11-project general plan for development of the water resources of the Savannah River Basin, the other comparably large project being Clark Hill, the construction of which is substantially completed. Together Hartwell and Clark Hill will produce somewhat more than half of all the electric energy ultimately to be produced by the entire system of 11 projects.

The reservoir to be created by the Hartwell Dam, with storage capacity of 3,495,000 acre-feet below the maximum surcharge elevation, ranks among the very largest reservoirs east of the Mississippi River. Its surface area at elevation 660 feet, top of the power pool, is 56,400 acres. Consideration of these facts along with the power installations of 180,000 kilowatts initially and 300,000 kilowatts ultimately, leads to the inevitable conclusion that Hartwell will be ideally adapted for operation on the peaks of the system load. In this connection the following paragraph is quoted from a letter dated November 3, 1952, from the regional engineer of the Federal Power Commission at Atlanta, Ga., to the District Engineer, Corps of Engineers, at Savannah:

"The Hartwell project as planned is ideally suited to provide peaking-type power. The physical characteristics and hydraulic conditions obtaining at the site, including adequate space for a large powerplant, a large amount of water-storage capacity, abundant runoff, and a high-power head, make it one of the most favorable sources for hydroelectric peaking-power installations remaining in the Southeast."

As to the need for the power to be produced by this authorized project, there is no difference of opinion among those competent authorities who are most familiar with the rapidly growing power market, and the relationship between power demand and power supply, in that region. Thorough studies by the Atlanta Office of the Federal Power Commission indicate that all of the power to be produced at Hartwell will be absorbed very promptly after the project works are completed. It is believed in fact that the power output of this project will be absorbed as rapidly as the generating units are installed to produce it.

Approximately 4 years as a minimum will be required to construct the project and make the initial installation of 180,000 kilowatts ready for commercial operation. It is seen, therefore, that even if the construction should be commenced in January 1954, the project could not be completed until about June 1958, and the Federal Power Commission studies indicate that by 1958 the demand for power in that market area will exceed the supply by 558,000 kilowatts. It is hoped, Mr. Chairman, that you and your colleagues will appreciate the significance of this statement. Not only would there be no reserve capacity but the aggregate demands for power would be very substantially greater than the available power supply. This statement is based upon a full consideration of all generating plants, both hydro and steam, now under construction or definitely contemplated for construction. It is difficult to understand, therefore, how there can possibly be any doubt regarding need for the Hartwell power.

BENEFITS TO DOWNSTREAM PLANTS

The average annual energy output of the Hartwell powerplant is estimated by the Corps of Engineers at 453 million kilowatt-hours, and in addition the flow regulation to be provided by the Hartwell Reservoir will convert 50 million kilowatt-hours of Clark Hill secondary energy into prime power each year. Thus Clark Hill will be substantially benefited by Hartwell. Likewise the Middleton Shoals and Goat Island projects downstream from Hartwell, both of which have been recommended for construction as parts of the comprehensive plan, will be benefited by the Hartwell flow regulation; and the privately owned Stevens Creek project below Clark Hill will be benefited in like manner.

ECONOMICS OF HARTWELL PROJECT

Assuming a market for the entire output of the Hartwell powerplant—which in view of the rapidly increasing power requirements of the region and the attractive characteristics of the Hartwell development seems to be a safe assumption—it is possible that the power revenues alone would well justify the entire

investment in this project. And of course the flood-control and other benefits will be substantial.

The benefit-cost ratio of the Hartwell project as shown in the definite project report is 1.48 to 1. You will recall that at the time of certain previous hearings before your committee the B–C ratio was much higher, the difference being due largely to the fact that in deriving the smaller ratio the Corps of Engineers did not give effect to the value of flood protection afforded by Hartwell to some 200,000 acres of fertile lands lying along the river between Augusta and Savannah. They are fully cognizant, however, that the 1.48-to-1 ratio does not reflect the true economic value of this project; but nevertheless the ratio is high enough to make the project attractive, and show it to be a sound investment. The certainty that there will be additional benefits of great importance will be reassuring to your committee and to the Congress.

WHAT TYPE OF WATER-CONTROL PROJECT SHOULD BE BUILT BY THE UNITED STATES?

The adoption by the Congress of a general plan for the development of the water resources of any river basin does not in any way preclude development of water power possibilities therein by private enterprise, this question having been settled definitely by the Supreme Court of the United States in its March 16 decision of the Roanoke Rapids case (345 U. S. 153). But even so, in order to protect the public interests the United States must build certain projects which private interests cannot reasonably be expected to build.

As to the extent of the participation of the Federal Government in the development of water resources, Secretary of the Interior McKay announced his views and the position of the administration in a press-conference statement on May 5, and during the evening of the same day in speaking before the National Small Business Men's Association he amplified and clarified his own position with respect to this important matter. In supporting private industry's role in the development of hydroelectric power, Secretary McKay pointed out that certain large multipurpose dams essential to the proper development of the water resources involved do not lend themselves to private construction and stated that for this reason the Government must continue to build such dams.

Secretary McKay, as reported in the press, stated: "We believe that private enterprise, wherever possible, should be allowed to develop waterpower projects, provided it does not interfere with the orderly developments of our natural resources. We need the support of the Federal Government in development of multipurpose dams on main stems of rivers, but where private enterprise can do a job that can assist in the overall project, it should be allowed to do so."

Applying these criteria to Hartwell we find that the project is on the main stem of the Savannah River, one of the most important streams in the southeastern United States; that it is an exceptionally large multipurpose water-control project which would hardly be built by private enterprise; and that its construction by the United States is essential to an orderly and reasonable complete development of the valuable water resources of one of the more notable river basins of the country.

It appears certain, therefore, that under the policy announced by the Secretary of the Interior Hartwell is in the category of projects to be built by the United States.

REPORT OF FEDERAL POWER COMMISSION

Mr. McWHORTER. May I ask that a letter-report from the regional engineer of the Federal Power Commission of Atlanta to the district engineer of the Corps of Engineers United States Army dated Nov. 3, 1952, relating to the power situation in that region be put in the record.

Senator KNOWLAND. That will go in.

(The statement referred to follows:)

FEDERAL POWER COMMISSION REGIONAL OFFICE,
Atlanta 3, Ga., November 3, 1952.

Col. ROBERT ERLENKOTTER,
District Engineer, Corps of Engineers,
Department of the Army, Savannah, Ga.

DEAR COLONEL ERLENKOTTER: This letter-report is in response to Maj. Harry Sugden's letter of July 14, 1952, requesting our views and recommendations concerning the power market and power installation for the Hartwell project on the Savannah River. Major Sugden also requested our estimate of the value of

power from the project and an up-to-date map showing transmission lines and generating plants in the market area.

This letter contains information on the market for power, the value of power, and our views as to the suitable power installation for the Hartwell project. A map showing transmission lines and generating plants was furnished you on October 9, 1952.

During the planning stages of the Hartwell project a high degree of cooperation at field level between the regional office and the corps' division and district offices has been maintained. Members of our staff have conferred from time to time with your planning and power engineers. In addition, we have made known our views on various power features through official correspondence. As a result of this cooperative effort we have reached substantial agreement on all major items of mutual interest. These items have included, among other things, the selection of the project site, the amount of potential power, the establishment of maximum power pool elevation and amount of reservoir drawdown, and the amount of initial and ultimate power installation.

The results of studies by the regional office staff on the important power features of the project are summarized in the following pages.

POWER MARKET AND UTILIZATION

Market area

The logical market for power from the Hartwell project is power supply areas 21, 22, and 23. This area includes most of North Carolina, Georgia, and Alabama, all of South Carolina, and parts of Mississippi and Florida. Since it is difficult to isolate and give separate consideration to the loads within the market area that would be served by this project, the calculations of power needs have been made for the entire area.

Projects included in study

In making our study we have given consideration to all Federal hydroelectric projects under construction which could serve loads in the market area and to those projects which have reached an advanced stage of planning by the Corps of Engineers. A complete list of the projects included is as follows:

Project	River basin	Installed capacity (kilowatts)	Estimated or reported minimum capability (kilowatts
Smith Mountain	Roanoke	35,000	26,000
John H. Kerr	do	204,000	170,000
Hartwell	Savannah	180,000	170,000
Clark Hill	do	280,000	252,000
Buford	Apalachicola	86,000	69,000
Upper Columbia	do	150,000	130,000
Jim Woodruff	do	30,000	33,000
Howell Mill Shoals	Alabama	200,000	176,000
Jones Bluff	do	51,000	51,000
Millers Ferry	do	57,000	57,000

Power supply

The above-listed projects have been divided into two groups. The first group consists of those projects under construction and includes John H. Kerr, Clark Hill, Buford, and Jim Woodruff. The second group consists of the other six potential projects. It has been assumed that the four projects under construction could be put in operation by the end of 1955. Owing to the location of the Smith Mountain project near the boundary of power supply areas 18 and 21, it is assumed that the output would be marketed about equally between these areas. Accordingly, only half the output of the Smith Mountain project is considered available for supply in the market area. The John H. Kerr project is also located near the boundary of power supply areas 18 and 21. Two-thirds of the project output will be marketed in area 18 and one-third in area 21 according to information furnished by the Southeastern Power Administration, the marketing agency. Accordingly, only one-third of the output of the John H. Kerr project is considered available for supply in the market area. The Jim Woodruff project is located near the boundaries of areas 22, 23, and 24. For this reason, two-thirds of the estimated supply from that project has been allocated to the market area.

One-third of the supply available from the John H. Kerr project, all the supply available from the Clark Hill and Buford projects, and two-thirds of the supply available from the Jim Woodruff project have been added to the supply of class I electric utility systems. The supply available in the market area from the four projects and from utility plants which are in existence, under construction, and definitely scheduled for construction at the end of each year through 1955 is as follows:

Power supply existing, under construction, and definitely scheduled for construction

[Capability in thousands of kilowatts]

Year	Fuel	Hydro [1]	Total
1952	3,871	1,748	5,619
1953	4,741	1,883	6,624
1954	5,496	2,014	7,510
1955	6,014	2,083	8,097

[1] Based on operation during adverse stream-flow conditions.

Estimated future loads

Reports filed with the Commission by class I utility systems contain estimates of power requirements through 1955. An extension of these requirements beyond 1955 has been derived from long-term estimates made in this office which are based on conditions of full employment and stimulation of load growth resulting from availability of an abundant supply of power in the market area. The estimated loads for 1952 and the 8 subsequent years are as follows:

Year	Estimated load (kilowatts)	Year	Estimated load (kilowatts)
1952	5,580,000	1957	8,210,000
1953	6,191,000	1958	8,655,000
1954	6,760,000	1959	9,087,000
1955	7,312,000	1960	9,515,000
1956	7,771,000		

Utilization of supply

The combined supply from Federal hydroelectric projects under construction and the supply of class I electric utility systems has been used in estimating the need for additional power supply in the market area in future years. A comparison of the estimated loads with the available supply is as follows:

Power adequacy analysis

[Thousands of kilowatts]

Year	Load	Supply	Indicated reserves
1952	5,580	5,619	39
1953	6,191	6,624	433
1954	6,760	7,510	750
1955	7,312	8,097	785
1956	7,771	8,097	326
1957	8,210	8,097	[1] 113
1958	8,655	8,097	[1] 558
1959	9,087	8,097	[1] 990
1960	9,515	8,097	[1] 1,418

[1] Negative figure.

Reserve generating capacity in excess of load requirements is needed in order to assure adequacy of supply during outages of generating and transmission facilities. Normally, a reserve capacity of about 15 percent of peak load is considered desirable. In the market area, machine capability at hydroelectric plants in excess of that available under adverse flow conditions is considered as a portion of the required reserves. The additional required reserves would be equivalent to about 10 percent of the peak load. From the above analysis it is evident that the foreseeable supply would meet the estimated loads and provide

reserve requirements through 1955. Additional supply would be required in 1956 and subsequent years.

An additional supply of 597,000 kilowatts could be provided in the market area from the Smith Mountain, Hartwell, upper Columbia, Howell Mill Shoals, Jones Bluff, and Millers Ferry projects. As previously mentioned, only half the output of the Smith Mountain project has been considered in computing the supply avialable to the market area. On the basis of the foregoing analysis, the supply from the six potential projects could be used to meet the additional needs in the market area in the years 1956 and 1957.

The dependable capacity of the supply available from the six potential projects was determined by means of load-curve analyses.

In making these analyses, representative load curves were developed for the market area with maximum demands approximating the load requirements for the year 1957. It was assumed that adverse flow conditions would prevail in that year and, therefore, that a minimum amount of energy would be available from the potential projects. Under these assumptions it was found that the entire supply available in the market area, including the supply from the six potential projects, would be dependable in the load.

POWER INSTALLATION

The Hartwell project as planned is ideally suited to provide peaking-type power. The physical characteristics and hydraulic conditions obtaining at the site, including adequate space for a large powerplant, a large amount of water-storage capacity, abundant runoff, and a high power head, make it one of the most favorable sources for hydroelectric peaking-power installations remaining in the Southeast.

Substantial agreement has been reached between representatives of your office and the Commission's staff relative to the amount of capacity to be installed in the Hartwell project. As the result of our joint studies, it is recommended that the initial installation be from 180,000 to 200,000 kilowatts, and that provisions be made in the project plans for an ultimate installation of at least 300,000 kilowatts. Incomplete investigation by our staff indicates that it would be desirable to give further study to the feasibility of making minimum provision for an ultimate installation from 50,000 to 100,000 kilowatts greater than that on which our staffs have reached tentative agreement.

POWER VALUES AND BENEFITS

Our estimate of the value of at-site power from the Hartwell project is based on the cost of obtaining power from privately financed alternative steam-electric plants, giving due consideration to differences in transmission losses, and annual transmission costs. The total value is composed of (1) a "capacity value," which corresponds to the fixed elements of the costs of power supply from alternative new steam-electric plants, and (2) an "energy value," which corresponds to the variable elemenst of the cost of power supply from such alternative plants.

No estimate, based on cost data in the market area as of July 1952, that the unit cost of construction for modern steam-electric plants with large units and step-up substations is about $135 per kilowatt, and the cost of fuel is 28 cents per million B. t. u. Our calculations, on these bases, show that the at-site unit value of power from the project is $21 per kilowatt per year for capacity and 2.8 mills per kilowatt-hour for energy. In arriving at the value of power, we have assumed that the project would be interconnected and operated for its best use in coordination with the generating and transmission facilities in the area so that the project power would have its greatest monetary value.

This power value is somewhat lower than the one previously furnished, which was based on the cost level as of July 1951. The contributing factor causing a downward trend in the value of power has been the current practice of the utilities to construct larger and more efficient steam-electric generating units. Consequently, the plant capital cost and operating expenses have been reduced substantially, which reflects in the value of both the capacity and energy components of power.

The capability of the power installation depends, among other considerations, on the design head of the turbines. Our studies, based on a 35-foot drawdown, indicate that the potential power available at the site with an initial installation of 180,000 kilowatts will be about 170,000 kilowatts of dependable capacity. The average annual energy is estimated to be 435 million kilowatt-hours.

Upon applying the component elements of the value of power, consisting of capacity at $21 per kilowatt and energy at 2.8 mills per kilowatt-hour, to the dependable capacity and the average energy available, the annual gross power benefits are found to be about $4,800,000. The annual benefits available to carry the fixed charges, after deducting estimated operating costs, will be of the order of $4,200,000. On this basis the at-site power benefits, if fully realized, would be sufficient to amortize an investment of about $90 million in a period of 50 years.

The annual power value which we have derived for the Hartwell project represents the upper limit of benefits and revenues which could be expected from the sale of power. If this potential power is marketed in a manner that does not give recognition and effect to the capacity values, it is to be expected that the revenue from the sale of this power would be reduced below the computed benefits.

Very truly yours,

ROBERT C. PRICE, *Regional Engineer.*

Mr. CARTER. I believe that gets all from the citizens. We appreciate the time you have given us. We have Willie Carter with us, president of the Hart County Chamber of Commerce an organization very much back of this project.

HART COUNTY CHAMBER OF COMMERCE

STATEMENT OF WILLIE CARTER, REPRESENTATIVE

Mr. Willie CARTER. I would like to endorse everything that has been said and we would appreciate any consideration shown.

Mr. (Mayor) CARTER. Mr. Stovall, president of the Lions Club, a very civic minded group.

LIONS CLUB

STATEMENT OF LELAND D. STOVALL, REPRESENTATIVE

Mr. Leland D. STOVALL. I endorse everything that was said. I had the privilege of studying the Tennessee Valley part of Alabama for 7 years and I know we have the same situation in the Savannah River Valley and we would like to see it developed.

Mayor CARTER. Mr. R. T. Broom from Madison County, Ga.

STATEMENT OF R. T. BROOM

Mr. BROOM. I endorse everything that was said. I think it is a wonderful project and we certainly need it and it would be of great help and a good investment.

Mayor CARTER. Thank you.

HARTWELL PROJECT

STATEMENT OF HON. OLIN D. JOHNSTON, A UNITED STATES SENATOR FROM THE STATE OF SOUTH CAROLINA

GENERAL STATEMENT

Senator JOHNSTON. Mr. Chairman and distinguished colleagues, I would like to make it a matter of record that Mayor W. C. Johnston, of Anderson, S. C., called me and requested that I appear before this committee and advise the committee that he is very much interested in the Hartwell project.

In addition, the president of the Chamber of Commerce of Anderson S. C., Mr. Saylors, called and asked me to let the committee know that he also is interested in the Hartwell project and that the chamber of commerce strongly supports it.

Mr. Chairman, I would like to call the committee's attention to the fact that Anderson is one of the largest cities near the site of this project. The western part of Anderson County is bounded by the Savannah River. I am a native of that county. Naturally I am much interested in the Hartwell Dam. The senior Senator from South Carolina, Mr. Maybank, and I had something to do with the Senate staying in session overtime last year, if you will recall, in an attempt to get this project through for the people of South Carolina. That shows how very interested we are.

NEED FOR PROJECT

I am one who believes that this is one of the most vital of the 11 projects on the Savannah River. That is the way I feel about it. I feel that it would do a great deal of good, and be of great benefit, to the people of Clark Hill and those down below.

Moreover, I am very much interested in industry. When you get an industry to establish, you not only help the community, but you help pay the taxes of this Nation. As has already been called to your attention, we are building one large cotton mill in Greenwood, S. C., which is costing several million dollars. The question has arisen as to whether or not we will have sufficient power in the area to furnish this mill the power that it will need to efficiently and economically operate.

VALUE TO INDUSTRY

I should also like to call to your attention the fact that we had 28 percent of the active cotton spindles in the United States in South Carolina last year. Eighty-five percent of these spindles in South Carolina are located in the northern part of the State. That means that from a power standpoint we need all the power we can get at the present time. I think that anyone who is familiar with the situation in the Piedmont area of South Carolina will confirm that.

As we build industries, we build a greater nation. And if there is a need for a powerplant anywhere in the United States, it is in the Piedmont section of South Carolina at the present time.

Mr. Chairman, I have a prepared statement which I should like to put into the record at this point which clearly points to the need for the Hartwell Dam.

Senator KNOWLAND. That will be placed in the record.

(The statement referred to follows:)

STATEMENT BY SENATOR OLIN D. JOHNSTON OF SOUTH CAROLINA

Mr. Chairman and distinguished colleagues, I am appearing before you today in support of favorable action on the appropriation for the Hartwell (Georgia-South Carolina) multipurpose project on the Savannah River.

As you already know, the Hartwell project, which is authorized by the Flood Control Act of 1950, is located 67 miles upstream of Clark Hill and is the second largest of the 11 projects approved for the Savannah River. Certain advance

planning and detailed field investigations have been made and the appropriation which is now being requested will make it possible to start actual construction work on the project. We believe, also, that it will make possible its completion in time to alleviate a rather serious power shortage in the Savannah River Basin, which is an emergency defense area.

You may recall that in my testimony before this subcommittee last year I stated that during my first term as Governor of South Carolina, I appointed a commission to study this particular stream, the Savannah River, in order to give to the people of this area the industrial power and the protection they needed.

At the present time, the urgent need for this project is emphasized by the requirements of both navigation on the lower section of the river and as a source of industrial water supply for vital defense plants near the basin.

The shortage of power now experienced and anticipated for the future in the Savannah River area is a matter of grave concern to all of us who make our homes and livelihood in that section of the South. Numerous surveys and investigations by governmental and independent agencies have all definitely pointed to the deficiencies in power in the Southeast. These surveys anticipate that if the additional electric power capacities now planned for construction are completed without delays, the power situation will be improved by 1955. All of them, however, emphasize that this statement is based on the overall nationwide picture and that, when the power supply is considered in its several power regions, the southeastern region will still be in a critical condition after 1955.

This is particularly true of this section of the Southeast. No other area has been progressing as rapidly in industrial plants and facilities as this the Piedmont area. At the present time, more than 28 percent of the active cotton-mill spindles in the United States are in South Carolina, and approximately 85 percent of these are in the upper part, the Piedmont section, of South Carolina. Many of these mills are operating three shifts. They need the power. Many of them are expanding, new ones are coming in from other sections of the country, and all this creates the need for new homes, new stores, and vastly increased services.

I might mention, in this connection, that the Springs Cotton Mills, a cotton-mill chain, used almost all of the cotton produced in South Carolina in 1951 and they are building even more cotton mills in this very same section. Right in Greenwood very near where this project is being constructed, a new cotton mill is being built costing millions of dollars.

So the need is there. Every Army engineer states that it is necessary to build this project. I have not talked with everybody who is qualified as an engineer who disagrees with the necessity for the project.

Let me quote from Progress Report No. 15, dated January 15, 1952, Electric Power Study, by the Joint Committees on Defense Production (S. Doc. No. 1062, 82d Cong., 2d sess.):

"Your committee cannot emphasize too strongly the need for realizing the long lead time required to increase the output of electric power. In the face of past and current predictions by men competent in this field * * * the Nation faces a power shortage, especially in the Southeast and Northwest."

This report clearly indicates that power requirements in the southeastern area will still be critically short even after 1954. Under adverse rainfall conditions, which would greatly reduce the output of hydro plants, this condition will become extremely detrimental to the entire economy of this region.

As you know, the Atomic Energy Commission is now constructing an extensive development in the Savannah River Valley, about 16 miles below Augusta. I have been unable to obtain an estimate of the power requirements of this installation. But I do believe that a sizable block of the existing generating capacity in this area will be required to completely satisfy the needs of the Savannah River operations plant of the Atomic Energy Commission. It is even possible that, when their requirements are known, the power picture in the Southeast will be even darker than has been painted in the various reports on the subject.

The Hartwell project would have nearly 3 million acre-feet of storage and would form one of the largest reservoirs east of the Mississippi River. Through it we are seeking, not only to maintain, but to expand the industrial strength of our region and our country. To do this, of course, we must be assured that we have an adequate supply of electric power. There is already a shortage, as I have said. This project—and others which are now under construction—will go a long way toward alleviating this condition. But we must build now so that we will not be short in the future.

The benefits of this project are high compared to the costs involved. There are benefits for power; benefits for navigation; and benefits for flood control. Supporting all of these, in addition, are the benefits our country will reap in the contribution the Hartwell project will make to our country's economic and industrial might—to its arm of defense. I am convinced that the funds requested is a sound investment, therefore, notonly for the people of the region, but for our national security as well.

Senator KNOWLAND. The committee will stand in recess until 2 p. m. tomorrow.

(At 7:20 p. m., Monday, May 18, 1953, the committee recessed to reconvene at 2 p. m., Tuesday, May 19, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY APPROPRIATIONS FOR 1954

TUESDAY, MAY 19, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 2 p. m., pursuant to recess in room F–39, the Capitol, Hon. William F. Knowland (chairman of the subcommittee) presiding.

Present: Senators Knowland and Ellender.

Also present: Senators Magnuson, Johnson of Texas, Daniel, and Jackson.

CIVIL FUNCTIONS

REDONDO BEACH, CALIF., BREAKWATER

STATEMENT OF HON. CECIL R. KING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA.

GENERAL STATEMENT

Senator KNOWLAND. The hour of 2 o'clock having arrived, the committee will come to order.

Congressman King.

Representative KING. Senator Knowland, as you perhaps know, the city of Redondo Beach in the area that I represent in southern California has been the victim of sea action to an extent that I believe well warrants the attention of the Congress.

It seems that there in nothing that can be expected on the basis of good engineering thinking that can bring about a correction of this situation other than the building of the proposed breakwater that is now partially completed, perhaps one-third completed. It seems that this difficulty, particularly the dangerous and erosive aspects, have arisen in the last 12 years which has given basis for the thought that perhaps this incomplete abutment or breakwater has so effected the normal flow of the sea at that point that nothing but its continuation to completely encircle the area as recommended by the Army engineers will be of a permanent corrective nature. There seems to be nothing else that will bring this about.

STORM DAMAGE

The aspect that disturbs the local citizenry is that each year the ocean makes greater inroads than in the previous year and, with considerable expenditures by local authorities, including the State

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of California, in merely replacing each year the damaged seawall, it seems this will just go on and on for years to come until the recommendations of the Army engineers are complied with.

In the last storm period during December and January, a conservative estimate of some $200,000 in additional damage occurred.

These storms, Senator, are not of unusual character. Just what will happen if we have an exceedingly high run of tides at a storm period can only be guessed at, but when normal storms will now encroach to the streets and utilities of the city, we do not have to resort to imagination to realize what will happen if an abnormal storm season comes through that area this year or next year.

PREPARED STATEMENT

I have prepared a statement, Senator Knowland, that quite well spells out the history of the situation, its present status, and the hopes of the citizens of the community with respect to my success in prevailing upon the Congress to appropriate funds on the basis of the recommendations of the Army Corps of Engineers as soon as possible to avoid what we all expect to come either this winter or in the succeeding winter.

Senator KNOWLAND. That may be printed at this point in your remarks in full.

(The statement referred to follows:)

REMARKS OF CONGRESSMAN CECIL R. KING, OF CALIFORNIA

REDONDO BEACH DILEMMA

Gentlemen, I come before you today with a project that has been properly termed "The Redondo Beach Dilemma." Redondo Beach is a residential and resort city of over 30,000 population, located approximately 18 miles from the center of Los Angeles, Calif., and is subjected each year to further inroads by the ocean due to the lack or completion of a breakwater that would permanently halt this destruction, which becomes greater as it occurs year after year.

I am well aware that since the unfortunate emergency arose in Korea, other than in cases of emergency, the past and present administrations have quite understandably not been inclined toward consideration of projects that may be postponed to a later date. However, this is an emergency situation that requires prompt attention inasmuch as each year it is postponed the damage becomes greater and the danger more acute as the inroads of the ocean have now progressed well into the streets and buildings, and the utilities of the city are now in imminent danger. Last winter's storm at Redondo Beach was that serious that it received radio, television, and headline attention throughout the United States and even in the Canadian press. You will note it also merited Picture of the week in Life Magazine.

To acquaint you a little further with the problem, a brief résumé of the history leading up to this emergency is necessary. In 1939, the city of Redondo Beach constructed a stone breakwater about 2,400 feet long. This breakwater extends seaward about 915 feet from the beach, thence curves down coast for a distance of about 1,485 feet. This breakwater cost $545,000—of this amount the city of Redondo Beach furnished $300,000, derived from a bond issue, and $245,000 was allotted by the Federal Emergency Administration of Public Works. In recent years succeeding winter storms have washed away over 250 feet of beautiful sand beach, destroyed homes and property running into hundreds of thousands of dollars. More than $300,000 has been spent by the city, county, and State in their efforts to hold back the ocean by the construction of a seawall. Each successive winter the waves crashing over the seawall cause it to be undermined and sink further causing costly repairs which are necessary to build it back to a protective height. During the storms of January of this year alone, Government engineers estimate that the damage amounted to more than $200,000

when the surf shattered at least 6 apartment houses and family dwellings beyond repair and washed out a 75-foot section of the main highway.

Gentlemen, if you will look at the photographs I have provided, you will be given a more graphic picture of the erosion problem and the subsequent destruction of property.

In the first picture marked No. 1, is a view of the beautiful beach shortly after the breakwater was halted for lack of funds, in 1939. The second picture, taken approximately 17 months later, shows the complete erosion of the sand so that little of the sand beach remains. If you will note in the upper right rear of the picture a building marked by an arrow, which is some considerable distance behind the others, this is the Fox Theater.

In the third picture you will note that the boardwalk and all the buildings have been washed away up to the Fox Theater.

Pictures 4, 5, and 6, show the damage-dealing waves and the resultant destruction of the dwellings after the recent storm of January this year.

In picture No. 7, there is shown a section of the main street in front of the $80 million Edison Plant that has been washed away by seawater pouring into new excavation on the site of the expanding Edison Plant.

Pictures 8 and 9 show the main business section of Redondo shortly after the January 1953 storm with rocks of football size hurled into the street and with the resultant debris and flood damage. Picture No. 10 is an airplane view of Redondo Beach and the breakwater. The waves are bent by the end of the breakwater and refracted so that they approach the beach at express train speed chopping away at the barricades.

The River and Harbor Act of May 17, 1950, authorized the adoption of a project at Redondo Beach Harbor in accordance with the recommendations of the Chief of Engineers as contained in House Document No. 303, 81st Congress. The authorized project provides for the reconstruction of about 1,485 linear feet of existing breakwater, construction of a 2,800 foot extension of the existing breakwater and a south breakwater 700 feet long; and for maintenance of the entire breakwater as reconstructed, the breakwater extension and the south breakwater subject to the conditions that local interests agree that through a competent and duly authorized public body, they will:

(*a*) Provide all lands and rights-of-way required for construction and maintenance of the proposed improvements, including transfer of ownership of the existing section of breakwater to the United States;

(*b*) Construct a quay wall along the land side of the harbor between the existing breakwater and the vicinity of Beryl Street, dredge the harbor area to a least depth of 12 feet below mean lower low water, deposit the dredge spoil landward of the quay wall and in the eroded area south of the wall, construct an access trestle, pier, slips, and all other facilities necessary for adequate berthing, servicing, maintaining, and supplying small craft, maintain the specified depth in the harbor area and maintain and operate the harbor facilities, except the breakwaters, with such facilities available to all on equal terms; and

(*c*) Hold and save the United States free from responsibility for any effects of the improvement on adjacent shorelines and from any damages due to construction and maintenance of the harbor improvements.

The present estimated Federal cost of constructing the authorized Redondo Beach project is $4,411,000.

Directly after authorization, as a result of the Korean conflict, this project, along with others, was postponed because of the urgency of funds and material needed for the emergency.

Gentlemen, the Redondo Beach situation is also an emergency—just as real to the people of Redondo Beach as was the disastrous floods of Holland. If this were not such an acute emergency, I would not be here before you requesting that funds be allocated for the construction of this project at this time. Furthermore, there appears to be no temporary expedient which can be undertaken which will provide relief until such time as the urgency of the national emergency is lessened. Construction of the authorized project is the only solution to the problem now existing at Redondo Beach with respect to both beach protection and navigation. Any further delay in this already long-authorized construction would be penny-wise and pound-foolish, and next winter the destruction will likely again be equally severe or even worse.

Representative KING. Thank you very much, I appreciate the courtesy of the committee, Senator, in permitting me this time.

Senator KNOWLAND. Thank you, Congressman.

We will also ask to have inserted in the record at this point a copy of the letter I have received from the Department of the Army, Chief of Engineers, relative to this Redondo Beach situation, and also a copy of a telegram received from the community; also a copy of a resolution by the city counsel relative to this subject.

I ask that that be printed into the record.

(The documents referred to follow:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., March 11, 1953.

Hon. WILLIAM F. KNOWLAND,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: Reference is made to your letter of February 21, 1953, enclosing a communication from Mr. Fred M. Arnold, city clerk of the city of Redondo Beach, Calif., together with a copy of a resolution adopted by the Harbor District Chamber of Commerce and a newspaper clipping, relative to the damage caused by the storm waters of the Pacific Ocean at Redondo Beach. In your letter, you inquire as to whether any assistance can be rendered by the Federal Government in rehabilitating the north beach.

A report, based on data furnished by our district engineer at Los Angeles, has been received from the Division engineer of our South Pacific Division regarding the recent damages to shore structures and the seawall at Redondo Beach. Beginning in December and continuing intermittently, particularly through a series of high tides during the period January 12–16, 1953, shore structures and the seawall at Redondo Beach were damaged by high waves. On January 16, 1953, our district engineer at Los Angeles estimated the property damage at $150,000. The district engineer now advises that, to include total property damages to date, the earlier estimates should be modified to $200,000. In addition, temporary measures taken by local agencies to strengthen the seawall and to dike off low areas until the danger subsides have cost about $60,000. The Redondo Beach City Council has recently voted $25,000 additional for continued protection and hopes to receive $25,000 from the county of Los Angeles and $50,000 from the State of California for the same purpose. It appears that the $15 million figure reported in various newspaper accounts refers to the property estimated by local interests to be in jeopardy rather than to actual damage done. In this connection, it is pertinent to mention that during the summer of 1952 all shore-front habitations between Sixth and Beryl Streets were condemned by the California State Health Board. Many of the homes and apartments in this area have been evacuated.

The River and Harbor Act of May 17, 1950, authorized the adoption of a project at Redondo Beach Harbor in accordance with the recommendations of the Chief of Engineers as contained in House Document No. 303, 81st Congress. The authorized project provides for the reconstruction of about 1,485 linear feet of existing breakwater, construction of a 2,800-foot extension of the existing breakwater and a south breakwater 700 feet long; and for maintenance of the entire breakwater as reconstructed, the breakwater extension and the south breakwater subject to the condition that local interests agree that, through a competent and duly authorized public body, they will (*a*) provide all lands and rights-of-way required for construction and maintenance of the proposed improvements, including transfer of ownership of the existing section of breakwater to the United States; (*b*) construct a quay wall along the land side of the harbor between the existing breakwater and the vicinity of Beryl Street, dredge the harbor area to a least depth of 12 feet below mean lower low water, deposit the dredge spoil landward of the quay wall and in the eroded area south of the wall, construct an access trestle, pier, slips, and all other facilities necessary for adequate berthing, servicing, maintaining, and supplying small craft, maintain the specified depth in the harbor area and maintain and operate the harbor facilities, except the breakwaters, with such facilities available to all on equal terms; and (*c*) hold and save the United States free from responsibility for any effects of the improvement on adjacent shorelines and from any damages due to construction and maintenance of the harbor improvements. The present estimated Federal cost of constructing the authorized Redondo Beach project is $4,411,000.

To date no funds have been appropriated for the construction of this project nor does the President's budget for fiscal year 1954 as submitted to Congress on

January 9, 1953, contain an item for that purpose. Accordingly, there are no funds available to the Corps of Engineers for the construction of the authorized project nor do we have the authority to provide emergency beach-protection measures. Continued maintenance of the existing seawall is, of course, only a temporary expedient and contributes nothing toward a solution of the problem. Complete removal of the existing breakwater would permit lateral flow of sand into the affected area and provide a degree of relief. However, construction of the authorized project is the only complete solution to the problem now existing at Redondo Beach with respect to both beach protection and navigation.

You may be assured that the Corps of Engineers is fully aware of the conditions which exist at Redondo Beach and are prepared to initiate construction of the authorized project as rapidly as practicable when funds are made available for that purpose by Congress.

The enclosures with your letter are returned herewith.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, United States Army,
Assistant Chief of Engineers for Civil Works.

REDONDO BEACH, CALIF., *February 17, 1953.*

Congressman CECIL R. KING,
House of Representatives Office Building.

Re your wire February 13 damage to seawall, $90,000; breakwater, $50,000; city streets, $40,000; private property replacement value of dwellings which were habitable before storm but now not habitable, $150,000. Photos, etc., are being accumulated and will be forwarded within the next week.

F. C. NYBYE,
City Manager, Engineer.

[Long Beach Independent, January 14, 1953]

REDONDO POUNDED BY FURIOUS SURF

As the storm-tossed Pacific lashed Redondo Beach with renewed fury, Mayor J. Russell Shea and City Manager Franz C. Nybye prepared to carry an appeal for financial aid to the State legislature today in Sacramento.

The city officials left for the capital Tuesday night after Gov. Earl Warren said he had no authority to allocate emergency funds without a legislative appropriation.

City Clerk Fred Arnold said the mayor and city manager will ask the State for $100,000 to raise Redondo's battered seawall. Arnold said giant waves have undermined the seawall, causing it to sink and endangering a main sewer line running near the beach.

County supervisors late Tuesday afternoon joined with the Redondo officials in the appeal for State aid, after Mayor Shea and Nybye appeared briefly before the board to ask county assistance.

The supervisors pointed out that the Redondo flooding was "not a county problem," but instructed the county manager to cooperate in asking State funds.

City Clerk Arnold said the city also wired Congressman Cecil King a request to push a Federal appropriation to finish the breakwater outside Redondo Beach. Completing the job will require from 4 to 6 million dollars, officials said.

Both Army and State engineers have completed damage surveys started earlier this week, but are keeping an eye on the area because of continued heavy surf, Arnold said.

Governor Warren announced he plans to confer with State Engineer A. D. Edmonston on requests to declare Redondo a disaster area, qualifying the city for Federal aid.

Huge combers which battered the shore for the fourth successive day Tuesday tossed rocks from the seawall into Hermosa Avenue, behind the most heavily damaged area. Water rushed across the street to the doors of the city's main shopping area in the Triangle.

Residential properties in the beach front between Third and Sixth Streets suffered still more damage to add to the $15 million already estimated, Arnold stated.

"But the erosion hasn't got to the sewer as yet," the city clerk reported.

CITY OF REDONDO BEACH, CALIF., *February 11, 1953.*

The Honorable WILLIAM F. KNOWLAND,
The United States Senate, Washington, D. C.

DEAR SIR: The city council has instructed this office to forward to you the enclosed certified copy of a resolution adopted by the Harbor District Chambers of Commerce in meeting assembled at Keystone, Calif., on the 16th day of January 1953, requesting from the State of California and the Federal Government assistance in the rehabilitation of our north beach.

Very truly yours,

FRED M. ARNOLD, *City Clerk.*

RESOLUTION

Whereas the city of Redondo Beach has experienced a major disaster occasioned by devastation caused by the storm waters of the Pacific Ocean; and

Whereas much property within the city of Redondo Beach along the coastline has been destroyed and the loss has been too great to permit rehabilitation from local finances; and

Whereas application has been made to the State of California and to the Federal Government for assistance in this emergency: Now therefore

The Harbor District Chambers of Commerce in meeting assembled at Keystone, Calif., on the 16th day of January, 1953, do hereby resolve, That the Harbor District Chambers of Commerce does hereby extend its sympathies to the city of Redondo Beach and does hereby pledge to the city of Redondo Beach any action within its power to assist in the rehabilitation made necessary by the recent disaster and to guard against future losses caused by intrusion of ocean waters: Be it further

Resolved, That this organization join with the officials of the city of Redondo Beach in requesting from the State of California and from the Federal Government funds and assistance in the rehabilitation and in the taking of such measures as will tend to alleviate the danger of further disaster in the future: Be it further

Resolved, That copies of this resolution be sent to the city of Redondo Beach and Chamber of Commerce of the City of Redondo Beach, with the request that they forward them to the proper State and Federal authorities.

I hereby certify that the above resolution was duly passed at the general meeting of the Harbor District Chambers of Commerce on the 16th day of January 1953.

WM. JENNER, *Secretary.*

CLERK'S CERTIFICATE

STATE OF CALIFORNIA,
County of Los Angeles, ss:

I, Fred M. Arnold, duly qualified and acting city clerk of the city of Redondo Beach, Calif., do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the Harbor District Chambers of Commerce in meeting assembled at Keystone, Calif., on the 16th day of January 1953, and presented to the City Council of the City of Redondo Beach, Calif., in regular meeting held February 2, 1953.

WITNESS my hand and the official seal of said city of Redondo Beach, Calif., this 10th day of February 1953.

[SEAL]

FRED M. ARNOLD,
City Clerk of the City of Redondo Beach, Calif.

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, February 26, 1953.

HON. WILLIAM F. KNOWLAND,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: Receipt is acknowledged of your letter of February 21, 1953 inclosing a communication from Mr. Fred M. Arnold, city clerk of the city of Redondo Beach, Calif., together with copy of a resolution adopted by the Harbor District Chambers of Commerce, and a newspaper clipping relative to the damage caused by the stormwaters of the Pacific Ocean, and requesting advice as to whether any assistance can be rendered by the Government in rehabilitating the north beach.

I shall be pleased to look into this matter and to advise you the status thereof at an early date. The inclosures to your letter will be returned to you with my reply.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, USA,
Assistant Chief of Engineers for Civil Works.

INDIAN PROBLEM AT THE DALLES

STATEMENTS OF JOHN WHIZ, WILLIE JOHN, AND HENRY THOMPSON

PREPARED STATEMENT

Senator KNOWLAND. The next witness is Mr. John Whiz.

Due to a very heavy program today, we have been working under the limitation of time. We note that there are three witnesses. Are all of them going to testify or are you testifying for the others?

Mr. WHIZ. Yes, sir; we have a statement of our attorney, Mr. Norman Easley, in behalf of the Mid-Columbia River Indians.

Senator KNOWLAND. That statement may be printed in full at this point in the record. Copies of the treaties and the map will be filed with the committee. If you desire to testify, you may proceed.

(The statement referred to follows:)

EASLEY, WHIPPLE & MCCORMICK,
Portland, Oreg., May 11, 1953.

Re proposed contracts with Warm Springs and Umatilla Tribes of Indians in settlement of fishing claims in the Columbia River.

COMMITTEE MEMBERS,
HOUSE AND SENATE APPROPRIATIONS COMMITTEES,
Washington, D. C.

GENTLEMEN: We represent the Mid-Columbia River Tribe of Indians, which is composed of approximately 320 men, women, and children who reside at or near Celilo, Oreg., and we submit the following memorandum on their behalf in opposition to the proposed contracts with the Warm Springs and Umatilla Tribes:

PART I. INTRODUCTION

In 1950, by Public Law 516, the Congress authorized construction of the Dalles Dam across the Columbia River, which dam when completed will inundate the ancient Indian fishing grounds in the Columbia River, particularly those at Celilo, Oreg. The Army engineers who bear the responsibility for the construction of the dam and the settlement of Indian fishing claims estimate that the water will first be raised in October 1955, and that it will be fully raised, utterly destroying the fishing grounds, in April 1956.

The Army engineers have been negotiating with various groups of Indians in the Northwest, and their representatives, for settlement of Indian claims to fishing rights in the Columbia River. The total value of Indian fishing claims to be compensated is said to be $23 million, which figure the Army engineers have arrived at based upon an estimate of the Oregon Fish Commission that the total annual value of Indian fish catch is $700,000. These figures do not include the depreciation in the total annual catch which has already been caused by the construction of the Bonneville Dam at Bonneville, Oreg.; so that, using the present basis, the total value of Indian fishing claims is conservatively estimated.

The Army engineers have attempted settlement of the Indian claims solely upon a division of the estimated $23 million among the Yakima, Warm Springs, Umatilla, and Nez Percé Tribes of Indians, together with a few unaffiliated Indians who live in the vicinity of Celilo, Oreg., in the proportion that the number of men, women, and children in each group bears to the total number of persons in all these groups. In other words, the proposed contracts with the Warm Springs and Umatilla Tribes of Indians authorize payment to the tribes in the sum of approximately $3,600 times the number of persons in each of those tribes. The same sum, when multiplied by the number of persons in other groups and added to the proposed Warm Springs and Umatilla settlements, totals $23 million. Settlement on this basis is urged by the Army engineers as a matter of expediency. Settlement on this basis certainly cannot be justified as a matter of legal right or fair play. It fails to take into account the ages of the persons in the tribes, their probable life expectancy, the value of the fish annually taken by each group, the number of persons who actually fish at Celilo, and the damage or loss to each

individual as a result of the construction of the dam. An individual who has never fished at Celilo nor received any benefit from fishing, theoretically, shares equally with the individual to whom fishing is his sole means of livelihood.

Our main opposition to the proposed contracts is based, however, upon a more serious objection to them than the measure of damages used by the engineers; and, rather than make an extended analysis of our objections, we shall merely outline the points which we believe should receive the most consideration. It should first be noted that all these Indian fishing claims are based upon original Indian title, recognized and secured to the Indians by various treaties with the United States. Legally and technically, no rights to fishing were acquired by the Indians through these treaties: the treaties merely recognized rights which the Indians already possessed. There are four treaties which recognize the right, each executed in 1855, and copies of the treaties are attached as exhibits. Exhibit A is the treaty with the tribes and bands nominated the Yakima Tribe; exhibit B, the Warm Springs; exhibit C, the Nez Percé; and exhibit D, the Umatilla.

PART III. OUTLINE OF POINTS IN OPPOSITION OF PROPOSED CONTRACTS

A. Proposed contracts with the Warm Springs Tribe of Indians:

1. The Warm Springs Tribe of Indians has no legal right to compensation because it released all right to fishing in the Columbia River by treaty of 1865, a copy of which is attached hereto as exhibit E. This treaty remains in full force and effect and has never been repudiated by the United States.

2. The Warm Springs Tribe has affirmed the treaty of 1865 by bringing suit against the United States to recover damages for an alleged unconscionable consideration paid under this treaty. This suit is now pending in the Court of Claims. The Warm Spring Tribe should not be allowed to claim settlement for fishing rights sold in 1865 and at the same time to maintain suit for recovery of additional consideration for the sale. It is seeking to have its cake and to eat it too. The Warm Springs Tribe should be left to its legal remedy.

B. Proposed contract with the Umatilla Tribe of Indians:

1. The Umatilla Tribe of Indians has no legal right to compensation because it has been and is located outside the area ceded to the United States in 1855, which is now to be inundated. The Columbia River did not and does not border on its reservation. An early map of the general area is attached and marked exhibit F.

2. The Umatilla Tribe has no legal right to compensation because none of the members in that tribe fished in the area to be inundated in 1855 or prior to that time. None have fished in that area until comparatively recently when modern means of transportation became available, and few fish there today. Reference is made to the Journals of Lewis and Clark and to Ross' Journal of Early Travels.

PART III. OTHER INDIAN CLAIMS TO FISHING RIGHTS

Although no formal contract has yet been executed, the engineers propose settlement with the Nez Percé Tribe on the identical basis as the proposed contracts with the Warm Springs and Umatilla Tribes. The Nez Percé Tribe, like the Umatilla, has no legal right to compensation because it has been and is located outside the ceded area in question. The Columbia River did not and does not border on its reservation. None of the Nez Percé Tribe fished in the area in 1855 or prior to that time, and few, if any, fish there today. Reference is made to the same source of material cited for the Umatillas. It should be particularly noted that the Journals of Lewis and Clark speak of the Nez Percé Tribe as acting as their guides to the headwaters of the Columbia River. According to Lewis and Clark, the Nez Percé guides were afraid to venture farther down the Columbia because of the warlike tribes in the vicinity of Celilo and The Dalles.

The Indians who have the only legal right to compensation are those Indians who fished at Celilo in 1855 and prior thereto and to whom that area was a "usual and accustomed fishing station." This includes those tribes, bands, and groups of Indians who lived along the banks of the Columbia River on both the north and south shores at the time of the treaties and who earned their livelihood through fishing. The descendents of those Indians still live there today and they make up the bulk of Indian fishermen whose rights will be destroyed by the dam and who now fish at Celilo.

The Yakima Tribe of Indians has a legal right to compensation because it is composed, in part, of Indians descendant from the tribes, bands, and groups of river fishermen on the north shore of the Columbia. The remaining Indians who have a legal right to compensation are loosely called the Mid-Columbia River Tribe of Indians. They are descendants of the tribes, bands, and groups of fisher-

men on both the north and south shores of the Columbia. They were parties to the Treaty of 1855 with the tribes of Middle Oregon, exhibit B, and the principal band of this group is called the Wy-am or Wy-um Tribe. It should be noted that these Indians, unlike the other tribes of Middle Oregon, did not sell their fishing rights and were not parties to the treaty of 1865, exhibit E. Stocket-Ly and Iso, chiefs of the River Indians did not participate in the 1865 treaty.

The peculiar status of the Mid-Columbia River Tribe of Indians has raised special problems in connection with the settlement of Indian fishing claims and the following is a brief summary of some of the problems.

PART IV. THE MID-COLUMBIA RIVER TRIBE OF INDIANS

The Mid-Columbia River Tribe is composed of approximately 320 men, women, and children, about one-half of whom are unenrolled in any organized Indian tribe, and all of whom live off the reservations. The large majority of those Indians who are enrolled are members of the Yakima Tribe. For one reason or another, the enrolled Indians distrust their tribal councils and representatives and have chosen to seek compensation for loss of their fishing rights through the Mid-Columbia River Tribe. All of these Indians have a common bond historically and culturally for they are all descendants of Indian bands who lived along the river and supported themselves by fishing. Distrust of the organized tribal councils stems mainly from past discriminations against them as nonreservation Indians, and they are particularly apprehensive because of section 601, et seq., title 25, United States Code Annotated, which gives the Yakima Tribal Council wide discretion in controlling membership in the tribe and precludes nonreservation Indians from their otherwise lawful inheritances.

The Army engineers have refused to negotiate with the Mid-Columbia River Tribe because some of its members were enrolled elsewhere and because the Mid-Columbia River Tribe is not officially recognized as such by the Bureau of Indian Affairs. The engineers have shown a willingness to settle with the unenrolled members of this tribe on the same basis as the proposed contracts; that is, payment to each unenrolled Indian in the sum of approximately $3,600. The mechanics for accomplishing the settlement is vague, but the engineers have talked about these Indians becoming members of one of the organized tribes and payment to the organized tribes to include the Mid-Columbia River Indians. In other words, payment to the Mid-Columbia River Tribe would be administered by the very tribal councils which these Indians distrust and because of which these Indians are seeking compensation without the organized tribes.

The problem arises out of the inability of the engineers to look beyond the artificiality of enrollment. We perceive no practical difficulty in separating these nonreservation enrollees from the Yakima Tribe and treating them as members of the Mid-Columbia River Tribe of Indians. Indeed, they consider themselves members, and are members, of the Mid-Columbia River Tribe in all other respects. Their plight is distinguishable from the reservation Indians in that the members of Mid-Columbia River Tribe make their homes on the shores of the Columbia River and depend upon fishing, almost exclusively, for their livelihood; whereas, the vast majority of reservation Indians never fish in the Columbia River and have never been, and are not now, dependent upon fishing as a source of livelihood. Moreover, most of those reservation Indians who do fish do so merely to supplement their income from their reservations and other employment.

The Mid-Columbia River Tribe of Indians has executed attorneys claim contracts, which have been submitted to the Bureau of Indian Affairs for approval. To date the Bureau has neither approved nor disapproved the contracts. Approval would, in effect, be recognition by the Bureau of the existence and separate interests of these Indians, and it is hoped that the engineers would then negotiate with the Mid-Columbia River Tribe as a separate group. However, the Indians have now done all that is possible to gain recognition and the next move is up to the Bureau. Of course, the Indians' situation will be stymied if approval is not forthcoming.

In addition, nine test cases of individual Indians of the Mid-Columbia River Tribe have been brought against the United States to recover compensation for loss of fishing rights through the construction of the dam. The United States District Court for the District of Oregon dismissed these suits as having been prematurely brought and appeal is now pending in the United States Court of Appeals for the Ninth Circuit. If the district court is upheld, the Mid-Columbia River Tribe will be forced to wait until the water is fully raised before its legal rights can be tested and ascertained in the courts and before compensation can be recovered by it.

Previous petitions to the Congress by these Indians have failed to win their separate recognition. At the suggestion of the Honorable Guy C. Cordon, Senator from Oregon, a proviso was submitted to be incorporated in the present appropriations bill, which would allow the engineers to deal separately with the Mid-Columbia River Tribe of Indians. A copy of that proviso is attached hereto as exhibit G. We are unaware whether the proviso has been considered by the Congress.

Another special problem arises out of the fact that the Mid-Columbia River Tribe of Indians, by and large, are those Indians who actually reside at Celilo, Oreg. They are the Indians who have the most to lose as a result of the construction of the dam. They do not have allotments elsewhere and they are living in crude shelters, some of which were provided by the Army engineers on public domain lands. These Indians stand to lose not only their fishing rights, but also their homes and some provision should be made for their rehabilitation. The Army engineers have communicated to the Indians or their representatives no offers or suggestions as to the rehabilitation of the Indian families who will be flooded out. Furthermore, some of the Indians of the Mid-Columbia River Tribe lost their homes when the water was raised behind the Bonneville Dam, and despite assurances on the part of the engineers, these families have never received any assistance or compensation for the loss of their homes.

CONCLUSION

The Mid-Columbia River Tribe of Indians oppose the proposed contracts with the Warm Springs and Umatilla Tribes and oppose settlement with the Nez Perce on the grounds that these Indians have no legal right to compensation for the loss of alleged fishing rights in the Columbia River. It is submitted that they have no moral right to compensation either, and the only justification for payment to these tribes is that they are composed of Indians.

The Indians who have the only legal as well as moral right to compensation are the Yakima and Mid-Columbia River Tribes of Indians for they are descendants from those Indians to whom Celilo and the adjacent area was a usual and accustomed fishing station in 1855. They are the Indians who are fishing today and who live in the area to be affected. Any division of an estimated total value of Indian fishing rights should be made solely among those Indians who have a legal right to compensation and their compensation should not be reduced by payment of portions of that fund to others who have no such right.

In considering any proposed contracts for settlement of Indian claims to fishing rights, we urge the Congress to secure satisfactory answers to the following questions:

1. What is the legal basis, if any, for the claims asserted?
2. To what tribes, bands, or groups of Indians was Celilo and the adjacent area a usual and accustomed fishing station in 1855?
3. Did any claimants lose their fishing rights by the treaty of 1865, or any other treaty in which those rights were sold?
4. How do claimants whose reservations did not, and do not, border on the Columbia River justify their claims to take fish at Celilo?
5. How do claimants justify their claims to fishing rights in areas outside of those lands ceded by them to the United States?

Respectfully submitted.

EASLEY, WHIPPLE & MCCORMICK.

PROPOSED AMENDMENT TO ARMY CIVIL FUNCTIONS APPROPRIATION BILL

At the proper place in the bill insert the following proviso: "*Provided*, That the Chief of Engineers, Department of the Army, with the cooperation of the Secretary of the Interior, is hereby authorized and directed to negotiate separately with the Mid-Columbia River Indians, in providing compensation for all rights taken in connection with the construction and operation of the Dalles dam and reservoir."

(NOTE.—It is inherent in the foregoing proviso that the Secretary of the Interior would be charged with the duty to prepare a tribal roll for the Mid-Columbia River Indians.)

Mr. WHIZ. This is the main thing that we have, the statement of our attorney, and that covers pretty nearly the whole situation of Mid-Columbia River Indians. Henary Thompson is delegate representative of all the Indians. He has to go through an interpreter.

Senator KNOWLAND. Mr. Thompson, you may be seated or stand just as you desire.

Mr. THOMPSON. My honored Chairman, I have just a few words to say before you today.

EFFECTS OF DAM CONSTRUCTION

My people are the Mid-Columbia River Indians and have lived there for many years along the Columbia River. We are worried very much about what is going on since the dam is going to go in that is going to jeopardize my river people from their livelihood. Myself and my people back home are all worried about the dam that is going to go in, and I will have nothing to depend on thereafter for my livelihood.

I have children behind me who will have the hardship since they have no allotments compared to the other people in their reservations.

It has been created that the Creator has created the mother earth and the river salmon came up upon that earth. It is going to be very hard on the Creator to know just how my people are going to be deprived and also other people from their livelihood, what they have depended on for generations in the past.

You know our land and country. If there was no water, we would have no crop. That is just the way it is going to be when the dam is going to be built that will stop the run of fish.

I am just wondering just what is going to become of my people when the dam goes in, what are they going to depend on for their livelihood thereafter.

REQUEST TO STOP CONSTRUCTION

I hope that you honorable Senators would stop this construction of the dam. There have been many dams built along the Columbia River, Snake River, and other tributaries.

I have just a few more words to say. When my people, my ancestors have met your people in order to make the agreements and the treaty, you see this man here with the uniform. Indeed the people that came to us and laid our ammunition and weapons away and urged us to live in peace, they are my younger brother because we are the ones that give them the land. They have wore blue uniform them days. I am just coming to the end of my statement.

I am the man the red man compared to the mother earth. The river flows and the red salmon coming up compared to my body. You see a red star up in the sky. That compares to my religion. That is all.

Senator KNOWLAND. Thank you.

Mr. WHIZ. I have Willie John who will say just a few words.

Senator KNOWLAND. Mr. Willie John.

Mr. JOHN. Honorable Senators, my brother, you see me here today. I am here standing before you, my body and my soul. This is the soul and body that the Creator has put upon this mother earth. Therefore my ancestors have made relation and friendship with you people.

My brother people have carried on the uniform as Army engineers there. They go a little beyond what the agreements have been agreed with my people and his people.

Above the Creator here listening to what we are talking about today. Now today the dam is going in and blasting the rocks which the Creator has created for the river to flow.

HAZARDS OF BLASTING

Where there is a dam blasting, I have to be watching all the time in order to get away from getting hurt. I am worried every turn I make. They have never respected us people.

I have come the long ways to testify before you, my friends, to make you understand just what is the situation that we Indians have back in the West.

The Creator has put salmon in rivers along upon mother earth which was created for my people to live on. Therefore I have no other property or stock or any other property to depend on for my livelihood.

When the dam goes in, who is going to take care of my Columbia River people?

Senator KNOWLAND. Thank you very much.

As I told you earlier, the statement prepared by your attorney will be printed in full relative to this matter of the Mid-Columbia Tribe. The copies of the treaties and the map will be filed with the committee.

Mr. WHIZ. Thank you.

Senator KNOWLAND. The next subject is the Eagle Gorge project. I see that Senator Magnuson and Senator Jackson are here.

EAGLE GORGE PROJECT

STATEMENT OF HON. HENRY M. JACKSON, A UNITED STATES SENATOR FROM THE STATE OF WASHINGTON

WITNESSES PRESENT

Senator JACKSON. There are a number of witnesses here besides myself and Senator Magnuson, who can discuss the project in more detail. There are Congressman Tollefson, Congressman Pelly, and Congressman Don Magnuson. There is George Thomas, the assistant general manager of the Seattle Chamber of Commerce. There are Col. Howard A. Hanson, Seattle, Wash., who is chairman of the Special Committee for Eagle Gorge Dam, and who is, I believe, also representing the chamber of commerce; and Mr. L. J. Costello, of Kent, a dairy farmer; Mr. Robert Jones, of the Seattle City Council.

I think that about two Members of Congress desire to make statements as do Mr. Costello and Mr. Hanson. I think it would probably be better if we just proceed to call the House Members first, if it is agreeable with the chairman.

Senator KNOWLAND. Yes. I know that the House Members have to get back.

I might say that we have a very long schedule today. The witnesses should be notified that, if they have prepared statements, the statement can go into the record in full. I am speaking now of outside witnesses, not congressional witnesses. If they could limit themselves to under 5 minutes, it will be appreciated.

STATEMENT OF HON. WARREN G. MAGNUSON, A UNITED STATES SENATOR FROM THE STATE OF WASHINGTON

Senator MAGNUSON. I might say, Mr. Chairman, that this, as you know, is an item that has been before us in many other appropriation hearings, and I think that the record is pretty complete on Eagle Gorge. Probably Congressman Tollefson is as familiar with this item as anybody else. If he would come up and tell us about it and if Colonel Hanson and Don Magnuson would tell us about it, we might get the record taken care of in that way. I have made statements on this on many occasions.

Senator JACKSON. As I understand it, Congressman Tollefson and Congressman Magnuson would like to make statements. Then it was suggested that Mr. Costello, Mr. Jones, and then Colonel Hanson will make statements.

STATEMENT OF HON. THOR C. TOLLEFSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

PREPARED STATEMENT

Representative TOLLEFSON. Mr. Chairman, I appreciate the opportunity of appearing before this committee.

Senator MAGNUSON. I might say that the Senate has approved this item on other occasions and, as the chairman probably well knows, we have run into trouble in the conference with the House on this item.

Representative TOLLEFSON. At the outset, may I ask permission of the chairman to insert my prepared statement?

Senator KNOWLAND. The statement may go into the record in full.

(The statement referred to follows:)

STATEMENT OF CONGRESSMAN THOR C. TOLLEFSON

Mr. Chairman and members of the committee, the Eagle Gorge flood-control project, in my congressional district, was authorized several years ago. No construction funds have yet been appropriated for it. Planning money has, however, been allocated to the extent of $200,000 since the project was certified in May of 1952 as being necessary to the defense effort. There are Federal activities and installations in the area. If sufficient additional planning money is allocated for fiscal 1954, the Army engineers advise that construction can begin before the end of that period.

I urge the committee, therefore, to provide the necessary planning money plus a reasonable amount of construction funds so that immediately after the planning is completed construction work can be started.

In connection with that request may I say that there are local funds available in the sum of $2 million which can be used to supplement Federal money as soon as Congress appropriates construction funds. $1,500,000 of this amount was provided by the State of Washington and $500,000 by King County in which the dam would be built. These local funds cannot, because of the conditions under which they were appropriated, be used until Congress provides some construction money, however nominal.

The dam is urgently needed. We have had very damaging floods in the past. Each year there is a constant threat of another flood. Such was particularly the case this past year. Only good fortune saved us from another devastating flood. The waters reached the crest of the dikes and could easily have broken through at some point to play even greater havoc with the surrounding land than in pre-

vious years. People who own property and live in the flood area are confronted annually with the possibility of another dreaded disaster.

I implore the committee to act favorably upon our request for help. The total estimated cost of the dam is slightly less than $20 million, of which $2 million will be furnished by local contribution. A Federal appropriation of a few hundred thousand dollars now will make the local funds available so that construction can get under way during 1954.

There should be no delay on the part of Congress in providing the needed money. This is a designated defense project. It has been so recognized not only by the President, the Bureau of the Budget, and the Army engineers, but by the people of the area. I include herewith a copy of a telegram received today which states the views of 22 mayors of cities in the Puget Sound district.

PROPOSED LOCATION

Representative TOLLEFSON. The Eagle Gorge flood-control project is proposed to be located in the western part of the State of Washington in my particular Congressional District. It is a project which, as Senator Magnuson has indicated, has been approved by Congress and, with respect to funds, has been approved by the Senate side but not by the House side.

To date no construction funds have been appropriated. However, some $200,000 in planning money has been allocated to the project.

I might say to the chairman and to the members of the committee that this project is one upon which the people in our area have been working for a number of years. It came before the Rivers and Harbors Congress some 7 years ago. Since that time we have been struggling with it either to meet a date line or to meet a criterion, and for that reason whenever the budget was about to be prepared we were just a little short from the standpoint of time in meeting the criteria. That is the chief reason why construction funds have not been authorized or appropriated by Congress.

I hope that the committee will bear in mind, without my going into it, the necessity of this flood-control project, because I believe that our witnesses to follow will touch upon that.

PROCEDURAL PROBLEM

I just want to bring to the attention of the committee the procedural problem which confronts us now: Namely, that it is not in the present budget. The reason for that is that the planning was not far enough along last fall so that the Army engineers or the Bureau of the Budget could have specific data upon which to place a budget figure. In other words, the Army engineers could not say exactly when the planning could be done, nor when construction would be able to take place. They are in a position to say now that planning will be done during fiscal 1954 and before the end of the year. They are in the position to say that construction can start in fiscal 1954.

Further than that, on July 15, according to the information supplied to use by the Corps of Engineers, they can furnish a firm estimate of cost.

Now, as I say, we have always been just a little bit behind in the time schedule. This is a defense project, has been so certified by the President, by the Bureau of the Budget and by the Corps of Engineers. So it meets all the criteria except that we run into this time schedule all the time.

PLANNING FUNDS

For the coming fiscal year we are asking for further planning money to complete the planning and for some funds for construction so that construction can begin.

Incidentally, there is local money to the extent of $2 million waiting out in the State as soon as Congress appropriates some construction funds.

Senator KNOWLAND. There is $100,000 in planning funds in the budget; is there not?

Representative TOLLEFSON. There is.

Senator KNOWLAND. Was this presentation also made before the House committee?

Representative TOLLEFSON. This presentation was made before the House committee just last week, and your committee was kind enough to allow these witnesses to testify before your committee while they were still here.

Senator MAGNUSON. We appreciate that, Mr. Chairman, because they are all here and have come from a long distance.

Representative TOLLEFSON. So we are hopeful and prayerful that this committee and the House committee will give serious consideration to our request for planning money and some construction money so that that money out in the State can be put to use during the next fiscal year. I shall supply further facts in my prepared statement.

STATE APPROPRIATION

Senator JACKSON. Congressman Tollefson, you did not explain that there is money available from the legislature?

Representative TOLLEFSON. There is 1½ million appropriated by the State legislature that has been appropriated and reappropriated for the last 4 years.

Then there is one-half million dollars set aside by the county of King, and that can be used as soon as we can get the $300,000 or the $400,000 in construction money. We are anxious that this defense project go ahead.

This is a defense project. For instance, there is located in the area where we have deepest water, when we do have a flood, an antiaircraft installation.

Senator MAGNUSON. Boeing Aircraft is right there also.

Senator KNOWLAND. Congressman Magnuson.

STATEMENT OF HON. DON MAGNUSON, A REPRESENTATIVE AT LARGE IN CONGRESS FROM THE STATE OF WASHINGTON

PREPARED STATEMENT

Representative MAGNUSON. Mr. Chairman and members of the committee, I want to thank you for the opportunity to appear here. I am not going to take much time.

In addition to associating myself with the presentation made by my colleague, Congressman Tollefson, I have a prepared statement here which I should like to leave for the record, and I think that I

shall leave all testimony beyond that to the others from the State who are here specifically for that purpose.

Senator KNOWLAND. And I am glad to have both Members of the House over here to give this testimony. The prepared statement may be made part of the record.

(The statement referred to follows:)

STATEMENT OF CONGRESSMAN DON MAGNUSON IN SUPPORT OF APPROPRIATIONS FOR PLANNING FUNDS AND CONSTRUCTION FUNDS FOR EAGLE GORGE FLOOD-CONTROL-DAM PROJECT IN THE STATE OF WASHINGTON.

Mr. Chairman and members of the committee, periodic floods on the Green River in the State of Washington, which I represent as Congressman at Large, have caused tremendous damage down through the years.

Along with the damage have come much human suffering, disruption of transportation, and danger to important defense installations and factories.

The proposed Eagle Gorge flood-control project, on behalf of which I appear here today, would prevent flooding in the Green River Valley in the area between the south city limits of Seattle and the community of Auburn, an area of about 19,000 acres.

Green River floods can have a serious effect on defense and related activities in the Puget Sound area, inasmuch as the Army has a tremendous supply depot at Auburn and the Boeing Aircraft Co. has great manufacturing plants in the south Seattle area. A flood on the Green River moreover could halt railroad service on the four transcontinental lines which use the trackage located in the area between Seattle and Auburn.

Considerable planning has been done on this joint Federal, State, and King County project. The State of Washington has allocated $1,500,000 and King County, Wash., has allocated $500,000 for use jointly with Federal construction funds.

I urge this committee approve an item of $300,000 for planning and preliminary engineering work on the Eagle Gorge project, and that it also allocate a token $450,000 to enable a start on construction and to allow use of State and county funds which are available for such work as construction of an access road, clearing of the reservoir site, and preliminary relocation work either on the Northern Pacific Railroad, on local roads, or on utilities in the area.

In addition to eliminating the periodic diastrous floods on the Green River, the dam and reservoir will permit industrial expansion, increase the water supply for the city of Tacoma, make possible the building of important new highways and bridge projects, and supply a safeguard against injury to defense and military operations in the Puget Sound area.

Senator KNOWLAND. Representative Thomas M. Pelly was here but had to return to the House Chamber, He has requested permission to file a statement. His statement will be placed in the record at this point.

(The statement referred to follows:)

STATEMENT OF REPRESENTATIVE THOMAS M. PELLY REGARDING EAGLE GORGE FLOOD-CONTROL DAM

Mr. Chairman and members of the committee, with all the emphasis at my command I urge you to give full consideration to recommending an appropriation looking to the construction of the Eagle Gorge Dam in the State of Washington.

Periodic inundations of the rich Kent and Auborn Valley have taken their toll each year, destroying cattle and crops, as well as washing away rich soil and destroying property and homes. Farmers in this area dare not grow high-value crops, and year after year have pleaded for this needed flood-control project. The increased value of crops when this dam is constructed and floods prevented will exceed the cost of the dam.

The Highway Department of the State of Washington is prevented from locating needed highways and bridges until the United States engineers as a part of this project fix a permanent channel of the Duwamish River. The King County Planning Commission cannot zone for housing and industry for the same reason.

Your attention, gentlemen, is called to the fact that this dam will be financed on the basis recommended by President Eisenhower in that it is a cooperative flood-control dam to be financed by Federal, State, and local funds.

I will not intrude on the time of other competent witnesses who will give more detailed testimony, but on behalf of the people of this afflicted area, mostly farmers, and people of small means, I plead for your sympathetic support of a small appropriation to make it possible to start construction of the Eagle Gorge Dam.

Senator MAGNUSON. Councilman Jones will be the next witness. This is Bob Jones, who is city councilman from Seattle and is thoroughly familiar with that whole lower end of the valley and Seattle where this problem occurs.

CITY OF SEATTLE, WASH.

STATEMENT OF BOB JONES, CITY COUNCILMAN

PREPARED STATEMENT

Mr. JONES. Mr. Chairman, and members of the committee, I would like to read a very short statement.

My name is Bob Jones. I am a member of the City Council of the City of Seattle, Wash.

The Seattle City Council has placed itself officially on record by resolution in support of requests being made here today for planning and construction funds necessary during the coming fiscal year to initiate work on the Eagle Gorge flood-control project, Green River, Wash.

SEATTLE'S INTEREST IN PROJECT

Seattle's stake in the construction of the Eagle Gorge Dam is a large one. We are a growing city. Our population increases, particularly in the past 10 years, have been considerably above the national average.

We face the necessity of protecting the farms, homes, and industries periodically flooded by the Green River. Many of the industries affected by the floodwater are vital defense producers. One is a military supply depot of vital importance to the Seattle Military Port of Embarkation and the Korean war effort. The construction of Eagle Gorge Dam will protect the homes and factories and farms existing in this area, and, at the same time, eliminate floods, which at present prevent proper utilization of these valley lands.

Seattle's interest goes beyond this request for Federal appropriations. King County, in which Seattle is located, has made available $500,000 in matching funds to assist in the construction of the Eagle Gorge Dam. Seattle represents 85 percent of the population of King County. The county's financial responsibility in this matter is matched by $1,500,000 in State-appropriated money, indicating the significance our entire State places on the need for this improvement.

COMPLETION OF COST ESTIMATES

In requesting Federal appropriations at this time we seek to save a year's delay in commencing construction of this dam. I am advised that in July final costs estimates will be available from the district engineer.

Senator MAGNUSON. Bob, right there, I want to say that the engineers are represented here. Is there any one of the engineers who can corroborate the statement that by July you will have these estimates available?

Colonel HIATT. The planning would not be completed by July, Senator.

Senator MAGNUSON. When would it be completed?

Colonel HIATT. The construction planning for the first construction could be complete in fiscal year of 1954.

Senator MAGNUSON. We wanted the record to show that.

Mr. JONES. I got that information.

If we fail to secure a Federal appropriation it will simply postpone 1 more year construction of Eagle Gorge Dam and extend the constant threat of floods in this valley, with the resultant loss to farms, homes, and industry.

May I make this statement part of the record?

Senator KNOWLAND. That may be made a part of the record.

(The statement referred to follows:)

STATEMENT OF BOB JONES, CITY COUNCILMAN, CITY OF SEATTLE, WASH.

My name is Bob Jones. I am a member of the City Council of the City of Seattle, Wash.

The Seattle City Council has placed itself officially on record by resolution in support of requests being made here today for planning and construction funds necessary during the coming fiscal year to initiate work on the Eagle Gorge flood-control project, Green River, Wash.

Seattle's stake in the construction of the Eagle Gorge Dam is a large one. We are a growing city. Our population increases, particularly in the past 10 years, have been considerably above the national average.

We face the necessity of protecting the farms, homes, and industries periodically flooded by the Green River. Many of the industries affected by the floodwater are vital defense producers. One is a military supply depot of vital importance to the Seattle Military Port of Embarkation and the Korean war effort. The construction of Eagle Gorge Dam will protect the homes and factories and farms existing in this area, and, at the same time, eliminate floods, which at present prevent proper utilization of these valley lands.

Seattle's interest goes beyond this request for Federal appropriations. King County, in which Seattle is located, has made available $500,000 in matching funds to assist in the construction of the Eagle Gorge Dam. Seattle represents 85 percent of the population of King County. The county's financial responsibility in this matter is matched by $1,500,000 in State-appropriated money, indicating the significance our entire State places on the need for this improvement.

In requesting Federal appropriations at this time we seek to save a year's delay in commencing construction of this dam. I am advised that in July final costs estimates will be available from the district engineer, and that construction money can be economically utilized during the new fiscal year. If we fail to secure a Federal appropriation it will simply postpone 1 more year construction of Eagle Gorge Dam and extend the constant threat of floods in this valley, with the resultant loss to farms, homes, and industry.

Senator KNOWLAND. Thank you, Mr. Jones.

Senator JACKSON. The next witness will be Mr. L. J. Costello, of Kent. He is a dairy farmer in the Green River Valley which is the area directely below the Eagle Gorge Dam, and right in the path of the floods that we have had over the past many years.

GREEN RIVER VALLEY, KENT, WASH.

STATEMENT OF L. J. COSTELLO, DAIRY FARMER

PREPARED STATEMENT

Mr. COSTELLO. Mr. Chairman and gentlemen of the committee, my name is Lawrence J. Costello. I live at Kent, Wash., right in the path of those floods. I was born there possibly about 60 years ago.

Senator MAGNUSON. You admit to 60 years?

Senator JACKSON. That is based on hearsay, you do not remember the exact date?

Mr. COSTELLO. We have been in the valley since 1858. We have battled and experienced the destruction of those floods over all this period.

I have filed a prepared statement with the committee for the record. I want to point out to the committee with your good grace, I am possibly the only man from the affected area who has ever appeared before your committee or has ever come back here. In other words, I think I am probably exhibit No. 1. I am a man that suffers.

GEOGRAPHY OF AREA

Now, I would like to take just a few seconds to point out and describe the nature of this valley. It is a long, narrow valley possibly 15 miles long, and 3 miles wide, hemmed on either side by pine-covered hills. It makes a narrow avenue which forms an approach up to the Boeing plant in the city of Seattle on the north.

Following the Pearl Harbor trouble and the war in the Pacific, the Federal Government moved in and established this depot at Auburn which Mr. Jones has mentioned. It is a 600-acre tract. They distribute from there Government supplies, sending them on through the port of embarkation over to Korea.

DEFENSE PLANTS

Right at the north end of the valley about 12 or 14 miles up, sits the Boeing plant, and in the city of Seattle and about halfway between those two installations, sits antiaircraft unit No. 28. That is on my property, and the pictures that I just handed to you gentlemen here show my home. Our home is the house with the hedge in front of it, just so you can get some idea of the water. That is only a half mile from this antiaircraft unit.

That unit was put in there with those 4 big guns, probably weighing in the neighborhood of 50 tons, as a means of defense, not only to protect the depot at Auburn and the great Boeing plant at the north, but also the city of Seattle as well.

FLASHFLOODS

When these floods come, which are flashfloods, and come probably within 24 hours, all that area where those guns are installed at the present time would be flooded over, and I am inclined to quote you the Indian's language when he was asked how deep the floods got

there and he said, "Heap big water. Heap big water; three squaws deep."

We have known the water to run over the railroad track there and wash the railroad track at this point 6 feet high.

RECENT FLOOD THREAT

About 90 days ago a flood threatened, and those guns were immediately dismantled and moved out of the area up to the hills. If a flood occurred there, they would probably have been out for maybe 2 or 3 weeks, and in that case your Boeing plant and the city of Seattle and this area down at this narrow valley would be without defense. It is an ideal approach for a sneak attack by enemy planes to come up this valley right up to this Boeing plant, and that is the reason that this antiaircraft unit No. 28 is there.

It is 3 years since this unit was put in there. It was on my neighbor's property, Mr. Brannan, and after being there a year and a half the Army engineers began to negotiate with us to move the installation over about three-quarters of a mile to our property where they are at the present time, and they have spent a great many hundreds of thousands of dollars fixing up that installation.

The point is this, members of the committee: Their decision to locate in that particular spot is the result of experience and mature judgment. They were located; they changed, and then they located again—and, as I understand it, the technique of locating those particular units of defense is on the form of a wheel or a circle. They have to be within a certain area. If they are not there, they are practically useless or out of line.

I have one point that I want to emphasize and then I will be finished. When Pearl Harbor occurred, gentlemen, we had no defense. I have been on the school board 19 years. The soldiers and equipment moved into that area, and we threw open our schools; we threw open our vacant halls. We opened up in some instances churches to accommodate the Armed Forces, that they might have a place to live while preparations were being made.

We have been in that area for years, and it is 20,000 acres of good agricultural land. The Army—the Federal Government—has moved in, and they are the biggest partner in the area at the present time.

I am not a polished speaker. I am not an attorney. I am a farmer. That is how I make my living, but I would be glad to submit or offer an explanation to anything that I might have omitted or answer any questions that you may have. I am here now, and it may be a long time before I will get back here again. It costs money to get here, and it takes time. If there is any information that you want from a man who is right there on the land and has suffered from these floods all this time, I would be glad to answer if I can do so.

Senator KNOWLAND. Thank you very much.

YEARLY FLOOD THREATS

Senator MAGNUSON. I just wanted to ask, Mr. Costello, is it true there has not been a year that we have not had either a flood or such a threat of flood that it has disrupted the whole economy of the valley?

Mr. COSTELLO. That is right.

Senator JACKSON. As I understand it, Mr. Costello, the water coming down the Green River not only has had a destructive effect on the 20,000 acres of the finest farmlands probably in the State but also on the plants down the waterway which could be threatened seriously in a high flood, the principal one being the Boeing plant at Seattle. Is that right?

FLOOD EFFECT ON RAILROADS

Mr. COSTELLO. That is right, and there are 4 transcontinental railroads running through the valley, and I have seen the 4 railroads tied up and all the highways tied up due to the floods.

I had a letter from the general at Fort Lewis stating that in the flood of December 1946, with the Army "ducks," they evacuated 528 residents from that area. Very likely that number of people would have drowned if it had not been for the service of the Army.

Senator ELLENDER. How many of these 20,000 acres of land would be covered by water in the rear of the dam?

Senator JACKSON. None of it.

Mr. COSTELLO. The water is affected by the rains.

Senator ELLENDER. You are proposing to build a dam across the valley, I suppose?

Mr. COSTELLO. It will be back in the foothills.

Senator ELLENDER. So that it will not cover any of the 20,000 acres of land?

Mr. COSTELLO. No.

Senator MAGNUSON. You have no problem up there at all.

I might say for the benefit of the committee that the industrial part of Seattle is at the south end of the city, and this river comes from the mountains and dumps into Puget Sound, but it goes through the industrial area after it leaves the agricultural area. We have the big Pacific Car & Foundry Co. down there which is making the guns for this next atomic test, and we have Boeing Aircraft, and the railroads come into Seattle of the south end, all the transcontinental railroads. Although the acreage does not sound great, this is the most strategic area that we have in the town. There are also some power features that will be of value to us.

Senator KNOWLAND. Thank you, Mr. Costello. Your prepared statement will be made a part of the record.

(The statement referred to follows.)

STATEMENT OF LAWRENCE J. COSTELLO ON EAGLE GORGE DAM PROJECT, GREEN RIVER, WASH.

Mr. Chairman and gentlemen, thank you for your interest in the Eagle Gorge Dam from the standpoint of national defense. I am Lawrence J. Costello of Kent, Wash., and represent the people of the Green River Valley, who suffer the ravages of the periodic floods that occur between the point of the proposed dam and Elliott Bay near Seattle. I was born in the valley 60 years ago, the descendant of a family that settled there in 1858. I therefore have had long experience with the floods in that area. They are bad; they are destructive; they are costly. In the words of the Puget Sound Siwash, "Sometimes they get 3 squaws deep."

VALLEY DESCRIPTION

The Green River Valley is a beautiful valley of some 20,000 acres; it is about 15 miles long and 3 miles wide, hemmed on either side by rising pine-clad hills. The soil is highly productive, and any portion not used for industrial expansion will always be devoted to agricultural production.

BELIEVE IN DAM

The people of the valley firmly believe the dam is their best means of flood relief. We endorse wholeheartedly all efforts to bring about its early construction.

We cooperate fully with the various agencies, such as the county of King, State of Washington, port of Seattle, and Seattle chamber, in their efforts to impress upon your honorable body the importance of this project from the standpoint of defense.

DEFENSE UNITS

There are three vitally important defense units now on the valley floor. The Auburn Army Depot, Antiaircraft Unit No. 28, and Boeing plant No. 2. The latter in the lower Duwamish Valley on reclaimed land beyond the reach of the flood.

The Auburn Depot and unit 28 are in the path of the floods and may become useless during a flood.

Only 2 months ago the guns on unit 28 were dismantled and moved out due to threatening floods, leaving the great Boeing plants without a defending arm to the south.

TRANSPORTATION CRIPPLED

During my time I have seen the four transcontinental railroads and State and county roads become unusable in time of flood, completely crippling transportation through the valley.

Such a state of affairs causes us to wonder when we remember Pearl Harbor.

In conclusion, I wish to remind you again that the Eagle Gorge Dam is, in our opinion, a defense matter of the first magnitude and is essential to the safety of the great Northwest.

Senator JACKSON. Colonel Hanson, I believe is the last witness, Mr. Chairman.

Senator MAGNUSON. Mr. Chairman, Colonel Hanson has lived, and on several occasions almost died, with this project for many, many years. I think he has probably forgotten more about it than most of us know. That is why he has come here. He has done an excellent job with this. It has been a civic problem with him, and I guess when you get right down to it, it is probably your hobby, Colonel Hanson?

Colonel HANSON. Yes, Senator, in a way it is.

SPECIAL COMMITTEE FOR EAGLE GORGE DAM

STATEMENT OF COL. HOWARD A. HANSON, CHAIRMAN

PREPARED STATEMENT

Mr. HANSON. This is a civic service. I have lived in Seattle for about 64 years and I taught school in the valley some fifty-odd years ago; I was in the legislature in 1907 when we were disturbed about the big flood in 1906. I helped draft the first resolution for flood relief in 1928 and have followed the thing along since that time.

Senator KNOWLAND. Mr. Hanson, I might say that your entire statement will be printed in the record at this time. Will you summarize your statement now under the 5-minute rule?

Mr. HANSON. I will ask permission then to file my written prepared statement and also to file a prepared statement on behalf of two committeemen who appeared before the House committee, Mr. William A. Galbraith, director of conservation and development in the State of Washington, and Mr. George T. Treadwell, who is the chief engineer and general manager of port of Seattle. They unfortunately could not stay over for this meeting.

Senator KNOWLAND. Those statements may go into the record at this time.

(The statements referred to follow:)

EAGLE GORGE RESERVOIR PROJECT, GREEN RIVER, WASH.

(H. Doc. No. 271, 81st Cong., 1st sess.)

Statement by Howard A. Hanson

Mr. Chairman and gentlemen, thank you for the privilege of this hearing. I am Howard A. Hanson, of Seattle, a lawyer and chairman of the special committee, representing the State, King County, the port of Seattle, the city of Seattle, and the Seattle Chamber of Commerce, for the Eagle Gorge Dam project. I have been connected with flood-control problems since 1919. For a number of years I was attorney for the city of Seattle and later for King County. While counsel for the county I had charge of the King-Pierce County River Improvement Commission's work, including an amount of flood-control litigation. I have been connected with the Eagle Gorge Dam project since it was first proposed in 1928.

PROJECT FACTS

1. *Location.*—The proposed dam and reservoir is on Green River, Wash., about 35 miles southeast of Seattle and 6 miles upstream from Kanasket.

2. *Purpose.*—Eagle Gorge Dam is primarily for flood control, to prevent flooding in the valley area between the south limits of Seattle and Auburn, some 19,000 acres.

3. *Multiple purposes.*—Secondary uses are storage after the winter flood season for the benefit of municipal water supply, fish conservation, and supplemental irrigation. Prevention of floods in the level valley bottomlands will make large areas available for industrial expansion of the Seattle area. Power is not authorized in connection with this project, but at some future time limited amounts of power could be produced without interfering with the flood control or other project purposes.

4. *Railroad relocation.*—The reservoir created by Eagle Gorge Dam will inundate a portion of the main line of the Northern Pacific Railway. It will be necessary to relocate about 14 miles of railroad.

5. *The dam.*—As presently planned the dam will be a concrete gravity structure with an ungated overflow spillway. During flood periods water will be released through three gated conduits in the dam.

6. *Dimensional data of dam.*—Height, 210 feet, length at crest 600 feet; length at base 150 feet; thickness at base 155 feet. Reservoir storage, 109,000 acre-feet.

7. *United local support.*—The project plan recommended by the Army engineers has united support of our engineers, officials, businessmen, farmers, and the general public.

8. *Authorization.*—Congress authorized the dam as a Federal flood-control project in the Flood Control Act approved May 17, 1950. The present approved estimate of the Chief of Engineers for the project, as of July 1952, is $19,880,000 of which $2 million is to be furnished by local interests.

9. *Local contribution.*—Under chapter 27, laws of 1949, the State appropriated $1,500,000 and King County $500,000 for local contribution to the project, conditioned that Congress should authorize it and make an appropriation therefor. The local funds have been reappropriated and are available without limitation when Congress initiates construction.

10. *National defense certificate.*—On May 26, 1952, the Director, Bureau of the Budget, notified the Secretary of the Army that planning work in fiscal 1952 on Eagle Gorge Reservoir was necessary to the defense effort, and approved allocation of $75,000 therefor from available appropriations. Since then $125,000 additional planning funds have been allotted.

11. *Project report.*—The Army engineers have advised us that the general design memo which will contain a firm project-cost estimate for this project will be available by July 15, 1953. This will permit construction funds to be used on the project in fiscal 1954.

12. *Benefit-cost ratio.*—The latest estimate of costs and benefits indicates a benefit-cost ratio of 1.21 to 1.0. Price increases, in the opinion of our engineers, will not exceed the national average. Increase in benefits accounts for the increase in the benefit-cost ratio.

FUNDS REQUESTED

13. In view of its importance and economic significance, the Eagle Gorge Dam is several years behind schedule. Now that it is moving forward we earnestly urge that its progress be advanced within sound engineering procedures.

Our local engineers are agreed that it is practical in fiscal 1954 to complete all planning which must precede actual construction of the dam and relocation of the railroad. We feel that a year can be saved on the construction schedule by initiating construction of the project, particularly the railroad relocation in the latter part of fiscal year 1954.

Our estimate for fiscal 1954, is $300,000 for planning and $450,000 for construction, a total of $750,000.

IMPORTANCE OF THE PROJECT

Seattle has a population of 502,000, King County, with 780,000, has 30 percent of the State's population. Control of the disastrous Green River floods has become a must in the economy of Seattle, the county and the State. The factor of primary defense need is that of area for expanding industry. The natural location for industry in Seattle and the county is in this valley, from Elliott Bay, in Seattle, to Auburn.

(*a*) *Seattle industrial area.*—Four pictures and charts tell the story of Seattle's waterfront, Elliott Bay and the Seattle industrial area.

No. 1. The condition in 1854, from an old United States coast survey chart. At the head of the bay, the river delta, and the extensive tideflats. Shown at the right, is the point, where Seattle began a century ago. Smiths Cove is at the top of the chart. The tideflats had up to 16 feet of water. At the river delta, the lowlands were subject to 7-foot floods, where the Boeing Airplane plants are now located.

No. 2. This picture, taken about 30 years later, shows the point, the tideflats and, to the right, Smiths Cove. No improvement of the waterfront or tideflats.

No. 3. This picture, in three sections, was taken in 1948. From Smiths Cove on the right, the entire waterfront has been rearranged. The tideflats and lowlands, between 1895 and about 1915, have been reclaimed, upstream to the south city limits for industry, all at local cost except for one Federal extension of the Duwamish Waterway. This industrial area, about 3,500 acres, served by 4 transcontinental railroads and located on one of the Nation's finest harbors, is Seattle and King County's primary industrial area. It is already occupied by industry and by the Government for defense uses.

No. 4. A chart, with explanations, made in 1951, shows the Federal defense occupancy of this same industrial area, 938 acres. In addition, the Navy occupies 242 acres at Smiths Cove, making a total of 1,180 acres.

(*b*) *Expansion into the flood area.*—The flood area from Auburn to the present industrial section is the only natural location for expanding industrial and defense uses, when freed of disastrous floods up to 10 feet in depth. The area is served by the four railroads. The adjacent uplands provide locations for workers homesites.

(*c*) *Local costs.*—The new area, at local cost, must be serviced with streets, highways, bridges, water, sewer and other utilities before occupancy for industry or defense uses. Also, the narrow, winding river section between Black River junction and the present waterway, must be straightened. The district engineer's 1947 estimate for this river work was $9,124,000. These operations cannot be undertaken until the dam is under construction.

(*d*) *Extent of new industrial occupancy.*—Based on industrial occupancy in the Seattle area for the 25-year period prior to 1948, 7,000 acres in the flood area will be required for industry in the 50-year period following construction of the dam. As a matter of fact, the rate of occupancy will be greater than in past years, due to the increasing population in the area served by Seattle. The project is not for industry, per se, since two-thirds of the flood plain will be devoted to other uses. It is the industrial factor, however, which makes it necessary to begin construction in fiscal 1954.

(*e*) *Seattle's tributary territory.*—Seattle is the chief center of the entire Columbia Basin region, in population, commerce, manufacture and industry, although not within the watershed of that great waterway.

Major Federal projects in the Columbia River Basin, existing and under construction by the Corps of Engineers and by the Bureau of Reclamation, aggregate very large sums of money. As a result, a great, expanding economy is under way in the Pacific Northwest. To meet the impact of that expanding economy, industrial expansion into the Green River Valley is essential.

(*f*) *Increase in population.*—In the decade 1940–50, the population of Washington, Oregon, and Idaho increased 34 percent; that of Washington, 31 percent; King County, 45 percent; and Seattle, 27 percent.

(*g*) *Increase in manufacture and in production employees.*—Census figures show that in the period 1947–51, the increase in value added by manufacture in Washington, Oregon, and Idaho was 47 percent; and in Washington 53 percent. Figures are not available for King County or Seattle.

For the same period census figures show that the number of production employees engaged in manufacture in the 3 States increased 26 percent; and in Washington, 30 percent.

(*h*) *Self-liquidating project.*—Well within the assumed life of the dam there will be returned to the Federal Treasury, from operations in upper valley, income taxes in amounts aggregating the total Federal outlay.

SUMMARY

The Eagle Gorge Dam is a key project, affecting local, State, regional, and national-defense interests. It is a sound project, economically justified and self-liquidating.

Expansion of the metropolitan Seattle industrial area is vital to the entire region, and to the national defense, in peace and in war.

The project is ready for construction. It is so critically needed that the local interests respectfully appeal to Congress to initiate its construction in fiscal 1954 with some amount of Federal funds, to accept the available local contribution and to save a year on the construction schedule.

STATEMENT OF W. A. GALBRAITH, DIRECTOR OF THE DEPARTMENT OF CONSERVATION AND DEVELOPMENT, STATE OF WASHINGTON, IN BEHALF OF EAGLE GORGE DAM, KING COUNTY, WASH.

My name is W. A. Galbraith, director of the Department of Conservation and Development of the State of Washington and chairman of the Columbia Basin Commission.

In the 1949 session of the Washington State Legislature, $1,500,000 was appropriated for use in the construction of the Eagle Gorge Dam. The law was so written that this appropriation could not be spent until King County had made a contribution for construction of this very important project and the National Congress had likewise made an appropriation for such construction.

King County immediately budgeted $500,000 as its contribution to the project. Every year since then King County has budgeted its original commitment and the 1953 sessions of the State legislature reappropriated its $1,500,000 for the third time. Neither of these local appropriations have been used because no appropriation has been made by Congress for the construction of Eagle Gorge Dam.

The people of the State of Washington and the State legislators have long recognized the Eagle Gorge Dam as the most important flood-control project in the State of Washington. This is evidenced by the fact that in the last two sessions of the legislature $500,000 has been the State's appropriation for all flood-control projects in the State of Washington over a 2-year period while $1,500,000 has been appropriated for the Eagle Gorge project alone.

The Governor and the legislators of the State of Washington have recognized that the construction of Eagle Gorge Dam will make possible great industrial development which will add considerably to the economy of the State.

The Columbia Basin Commission, a State agency for water, land, and industrial development, has made a study of the need for industrial development in the Seattle area for the processing of products from the vast irrigated area of the Columbia Basin project. The Commission finds that there will be a great need for development in the area which would be protected from disastrous floods by construction of the Eagle Gorge Dam.

Other members of the Columbia Basin Committee, present at this hearing, Loen Bailie, George D. Zahn, and Hubert Walter, administrative assistant of the Columbia Basin Committee, all concur in the above statement and the testimony presented by Howard A. Hanson and G. T. Treadwell.

We are very grateful for the opportunity to present this testimony before this committee.

STATEMENT BY G. T. TREADWELL, GENERAL MANAGER-CHIEF ENGINEER, PORT OF SEATTLE

INTRODUCTORY

Mr. Chairman and gentlemen, my name is George T. Treadwell, and I reside in Seattle, Wash. I am general manager and chief engineer of the Port of Seattle and am appearing here on behalf of that organization. In addition, I am chairman of the committee of engineers of the city of Seattle, county of King, and port of Seattle, said committee being a part of the Seattle Chamber of Commerce special committee representing the local interests for Eagle Gorge Dam project.

I am a licensed civil engineer in the State of Washington and have been associated with harbor development for the port of Seattle for the past 23 years. In addition to my work with the port of Seattle I have performed consulting engineering service for United States Army engineers through private engineering contractors in Alaska and on Puget Sound. I have associated with private engineering firms in preparing comprehensive plans for the port of Miami, Fla.; the port of Anchorage, Alaska; the port of Everett, Wash., and others. In addition to harbor development work for the port of Seattle, our engineering department under my supervision has designed and constructed Seattle-Tacoma International Airport, which we now operate.

EAGLE GORGE PROJECT

I have been a member of the Special Committee for Eagle Gorge Dam project for approximately 10 years. On December 16, 1948, along with others I appeared before the Board of Engineers for Rivers and Harbors, Department of the Army, here in Washington. Presiding at that meeting was Maj. Gen. Roscoe C. Crawford, Assistant Chief of Engineers and senior member of the Board.

Since that hearing, of course, considerable changes have taken place. The project has moved on to design stage, and money was appropriated by Presidential order for planning work. We have worked closely with the Army engineers in Seattle and are of the same belief that our local problems cannot be solved until after construction of Eagle Gorge Dam. I am referring to the lower section of the river from the head of present navigation to Renton Junction. This section of the valley is subject to local flooding as well as flooding from Green River proper. The necessary expansion in the Duwamish Valley cannot take place, and very little can be done about it until the dam has been constructed. We vision in the future a ship channel running from the present head of navigation to at least Renton Junction. At this point many acres of industrial area will be tapped.

In 1950 an extensive survey was made by the subcommittee of the Eagle Gorge Dam project relative to flooding in the Duwamish Valley.

1. Letters were received from the city of Seattle, superintendent of the water department, in which it was pointed out that it was impossible to adequately plan for future development until after the floodwaters were controlled.

2. Letters were obtained from Gordon Rowe, radarman, United States Navy (retired), in which he forcefully pointed out that, while Eagle Gorge Dam is primarily a flood-control project, it has a direct bearing on the national defense, and particularly on the need for industrial sites for national-defense industries.

3. R. W. Finke, then city engineer for the city of Seattle, stated that "Not a day should be lost in starting the construction of this dam, in order that available industrial sites be protected."

4. In addition, there were letters from Lester Evans, county engineer of King County; George A. Shearer, district engineer, State highway department; Henry Broderick, realtor of Seattle; Lambuth Sill & Co., realtors; and several railroad companies.

Consensus of opinion in Seattle is that, to handle her normal industrial expansion and be prepared to share in national defense, she must have additional industrial area, and construction of Eagle Gorge flood-control dam is the only way possible to make these lands usable.

In November 1951 a special study was made to show the present situation in the Seattle industrial area. An industrial map was prepared, and I would like to explain this map before filing it in the record for your use.

EXPLANATION OF MAP

The map shows, geographically—

1. In red, the impact of the war effort on the south industrial area, since the opening of the Korean conflict. Data attached to the map explain each of the tracts colored thereon.
2. In green, the locations of previously acquired Federal properties devoted to national-defense uses.
3. In yellow, Boeing Plants Nos. 1 and 2, and Boeing Airfield, devoted to national-defense uses.
4. The larger industrial holdings are designated.
5. Railroad tracks and yards serving the area are shown.

It is sufficient to state that in the south industrial district 938 acres are occupied or in the process of being acquired for national-defense uses, plus 242 acres held by the Navy at Smith Cove, or a total acreage in Government use in the Seattle area of 1,180 acres.

INDUSTRIAL EXPANSION AND NAVIGATION

One has only to look at a topographical map of Seattle to see that her industrial future has to be up the Duwamish and Green River Valleys. Most of the land now used for industry in Seattle is land that was reclaimed from Elliott Bay. This is no longer possible to do, and again I would like to emphasize that none of this can take place until after necessary appropriations are made by Congress for the construction of the dam.

Seattle is one of the great seaports on the Pacific coast. It has a fine harbor, sheltered and safe. In the northern and central portions of the harbor the water is very deep and does not lend itself to the economical construction of terminals for oceangoing vessels. Piers located in this area are mainly of the era of 1900, hastily constructed during the gold rush to Alaska. Most of them are no longer used for shipping purposes. Thus, the major burden of shipping is in the south portion of the harbor and along the east and west waterways. This property is now practically all being used. Today many of the industries connected with waterborne commerce demand large tracts of land adjacent to their berthing facilities, thus avoiding transfer charges and long truck hauls. This type of development would be feasible along the Duwamish River to Renton Junction without the use of locks. Some 88 steamship lines now make Seattle a port of call. The United States Government has large installations for both the Army and the Navy, and a good deal of the Korean-war materials and personnel are handled through Seattle.

It is to be noted that no request is being made here for any Federal money for developing of a ship channel in the Duwamish River at this time. However, in the preliminary examination and survey of the Green and Duwamish Rivers (H. Doc. 271, 81st Cong., 1st sess.), while no justification was found at the present time for construction of a ship channel, a further statement reads: "If the area becomes highly developed with industries making large amounts of exports, ship navigation may be very important. Therefore, planning at this time for any type of channel rectification in the Duwamish Valley should consider the possible ultimate construction of a deep-water channel." The work in the Duwamish Valley, unless it ultimately involves navigation, will of course be a local matter

PROJECTS HINGING UPON THE START AND COMPLETION OF EAGLE GORGE DAM

In 1951 the Legislature of the State of Washington passed an enabling act whereby the city of Seattle, county of King, and port of Seattle may jointly survey, investigate, and make studies for determining the type of improvement along any navigable river emptying into tidal waters in such city, county, or port district, including piers and future industrial and manufacturing uses. In August 1951 the port of Seattle by resolution and the county of King by resolution and the city of Seattle by ordinance formed a joint board to have the necessary survey in the Duwamish Valley from the head of navigation to Renton Junction made. Several large national engineering firms were contacted, and arrangements have been made to have the survey made. The port of Seattle and the city of Seattle both have indicated their willingness to enter into a contract to have the survey made. At the present time King County believes the construction of the dam should be assured by appropriation of Congress, and then they too

are willing that the survey be started. In my own opinion, I think the survey should be started immediately. However, that is just another reason why it is imperative that appropriations be made to start the dam.

Another project in the advanced stage is the construction of a major six-lane freeway which will bypass Seattle and in its approach from the south will, of course, have to cross the Duwamish Valley. Applications were made last week to the local division office of Army engineers by the State highway department for permission to construct 2 bridges, 1 for northbound traffic and 1 for southbound traffic, across the Duwamish River. Obviously, if the bridges are constructed in that location without benefit of planning, in a few years they will have to be moved or destroyed.

SUMMARY

In summing up my remarks, first, I would like to thank you for being given this opportunity to appear before you, and my only summary is that in comparison to many projects throughout the Nation here is one small in amount (the total project cost is less than $20 million, which will be used over a period of several years). If a token appropriation is made this year through the use of local money which has been explained by Colonel Hanson, the project can be started as soon as the appropriation has been made.

I trust that you gentlemen will give this vital matter the full consideration that is due it.

RESOLUTION No. 13989

Whereas Congress has adopted the Eagle Gorge Dam flood-control reservoir project and authorized its construction by the Flood Control Act of 1950, approved May 17, 1950 (Public Law 516, 81st Cong., ch. 188, 2d sess.; see Army Engineers Report on Eagle Gorge Dam Project: H. Doc. 271, 81st Cong., 1st sess.; and

Whereas by the Civil Functions Appropriation Act of 1952 Congress appropriated funds and authorized the President of the United States to allocate these funds to projects which he found to be necessary in the defense effort, and the President allocated $75,000 of these funds for planning work in connection with "Eagle Gorge Reservoir, Wash.," having found the Eagle Gorge Dam flood-control reservoir project on Green River in the State of Washington necessary to the defense effort; and

Whereas devastating floods will continue to inundate Green River Valley, causing great damage to agricultural and industrial areas and the highways in the valley; and

Whereas comprehensive future planning for the development of the areas now subject to floodwaters cannot be undertaken; and

Whereas the Federal Government has determined the necessity of the Eagle Gorge Dam flood-control project as a multipurpose project for the development of power and flood control; and

Whereas King County has appropriated and set aside the sum of $500,000, which is now available as a cash contribution toward the cost of a multipurpose dam at Eagle Gorge; and

Whereas the continuing work of revetment, riprapping, channel clearance, and the building of dikes by King County cannot alone eliminate the constant threat of future damage to inundated areas: Now, therefore, be it

Resolved, That the board of county commissioners does hereby request the Senate Subcommittee on Appropriations to secure sufficient funds to complete planning work and to initiate construction on the project; and be it further

Resolved, That this resolution be and is hereby addressed to Senator William Knowland, chairman, Civil Functions Appropriation Subcommittee, Washington, D. C.

Passed this 4th day of May 1953.

JAMES A. GIBBS,
WM. H. SEARS,
DEAN C. MCLEAN,
Board of County Commissioners, King County, Wash.

Attest:
[SEAL]

ROBERT A. MORRIS,
Clerk of the Board.
By RALPH R. STENDER,
Deputy.

RESOLUTION No. 16320

Whereas Congress has adopted the Eagle Gorge Dam flood-control reservoir project and authorized its construction by the Flood Control Act of 1950, approved May 17, 1950 (Public Law 516, 81st Cong., ch. 188, 2d sess). (See Army Engineers' report on Eagle Gorge Dam project H. Doc. No. 271, 81st Cong., 1st sess.); and

Whereas by the Civil Functions Appropriation Act of 1952 Congress appropriated funds and authorized the President of the United States to allocate these funds to projects which he found to be necessary in the defense effort and the President allocated $75,000 of these funds for planning work in connection with Eagle Gorge Reservoir, Wash. having found the Eagle Gorge Dam flood-control reservoir project on Green River in the State of Washington, necessary to the defense effort; and

Whereas devastating floods will continue to inundate Green River Valley causing great damage to agricultural and industrial areas and the highways in the valley; and

Whereas comprehensive future planning for the development of the areas now subject to flood waters cannot be undertaken; and

Whereas the Federal Government having determined the necessity of the Eagle Gorge Dam flood-control project as a multipurpose project for the development of power and flood control; and

Whereas the State of Washington and King County have appropriated and set aside as a cash contribution toward the cost of a multipurpose dam at Eagle Gorge the amount of money allocated to local authorities for this purpose; and

Whereas all of the data in this connection is in the possession of the House Subcommittee on Appropriations: Now, therefore, be it

Resolved by the City Council of the City of Seattle: That we petition and beg of said subcommittee to secure and make available sufficient funds to complete planning work and to initiate construction on this project, the consummation of which is indispensable to the industrial development of Seattle and to the welfare of the towns and farming communities along the Green River; and be it further

Resolved, That this resolution be and is hereby addressed to Senator Wm. Knowland, Member of Congress, chairman, Civil Functions Appropriation Subcommittee, Washington, D. C.

Adopted by the city council this 11th day of May 1953, and signed by me in open session in authentication of this adoption this 11th day of May 1953.

M. B. MITCHELL,
President pro tempore of the City Council.

Filed by me this 11th day of May 1953.

Attest:

W. C. THOMAS, *City Comptroller and City Clerk.*
By: W. A. PERINE, *Deputy Clerk.*

RESOLUTION No. 336

Whereas the Green River Valley, south of the city of Seattle, in King County, State of Washington, has had a history of recurring floods from the Green River, and

Whereas said floods and the threat of their recurrence in the future have prevented proper utilization of the area for industrial development and long-range planning of such development, and

Whereas planning for the development of the area and said development itself are contingent upon the control of such floods and the removal of the threat of their recurrence, and

Whereas more immediately important, the construction of the Eagle Gorge Dam to control Green River will through the elimination of floods provide necessary factory sites, such as the Boeing airplane plant near Seattle, so essential to the defense of our country, and

Whereas the control of the said river can be accomplished only with the participation of the United States Government in the planning and construction of control measures: Now, therefore, be it

Resolved by the city council of the city of Kent, in regular meeting assembled, as follows:

(1) That the Civil Functions Appropriation Subcommittee of the Senate Appropriation Committee be and it is hereby respectfully requested and urged to include in the civil functions appropriation recommendation funds sufficient to complete final planning and begin actual construction upon the Green River project in King County, State of Washington: Be it further

Resolved, That copies of this resolution be sent to Senator William F. Knowland, chairman, Civil Functions Appropriation Subcommittee, Senate Appropriation Committee, Washington, D. C.

Passed by the unanimous vote of the city council of the city of Kent, this 4th day of May 1953.

DAVE J. MOONEY, *Mayor, City of Kent.*

Attest:

CHARLES BRIDGES, *City Clerk.*

RESOLUTION No. 9

Be it hereby resolved by the City Council of the City of Auburn:

Whereas the City Council of the City of Auburn has been fully informed that a hearing will be held on May 14, 1953, in Washington, D. C., on the Green River project of the proposed Eagle Gorge Dam before the House of Representatives Subcommittee on Appropriations, which hearing is for the purpose of securing an appropriation to complete final planning and to commence construction on said project, and,

Whereas it is of vital importance to the industrial development of the Green River and Duwamish Valley, and to the protection of private property and to eliminate the flood threats to important governmental defense installations, that a flood-control dam be constructed at Eagle Gorge without delay: Now, therefore, be it

Resolved, to Senator William F. Knowland, chairman, Civil Functions Appropriation Subcommittee, Senate Appropriation Committee, Washington, D. C., we here in the north Pacific area know of no other project, the completion of which, would contribute more to the safety and defense of our country, than that of the Eagle Gorge flood-control dam on the Green River in King County, Wash.

The construction of this dam will through the elimination of floods provide the necessary industrial sites so essential to the defense of our country.

We point to the Boeing aircraft plant near Seattle as a good example of the type of defense industry that may be located on the floor of the Duwamish and Green River Valleys when the floods have been eliminated by completion of the Eagle Gorge Dam.

Due to the urgency of the situation, and the constant threat of flood damage, and in accord with our sincere convictions on the matter, we urge upon you and the honorable members of your committee early consideration and affirmative approval, if at all possible, the request now before you for funds to complete planning and begin construction of this essential defense project, the Eagle Gorge Dam.

Adopted and passed by the City Council of the City of Auburn, at a regular meeting thereof, held on the 5th day of May 1953, and signed by the mayor and city clerk of said city, in authentication, of its passage.

DAYTON A. WITTER, *Mayor.*

Attest:

ROBERT E. WALKER, *City Clerk.*

RESOLUTION No. 852

Whereas the City Council of the city of Renton at their regular council meeting on May 5, 1953, desire to do all within their power to secure national appropriations to complete the final planning and start the actual construction on the Eagle Gorge Dam, which we consider to be an essential defense project: Now, therefore be it

Resolved by the City Council of the city of Renton, that this resolution be addressed to Senator William Knowland, chairman, Civil Functions Appropriation Subcommittee, Senate Appropriation Committee, Washington, D. C.

The completion of this project would contribute a great deal toward the safety and defense of this area. The completion of the Eagle Gorge flood-control dam on the Green River in King County, Wash., through the elimination of

floods, would provide a large area necessary for factory sites essential to the defense program of our country.

We wish to state that the Boeing Airplane Co. plants in Renton and Seattle are good examples of industries which could be located in the area, which would be protected from floods by the construction of such dam.

We, therefore, urge that the honorable members of your committee give early consideration and approval of the request herein outlined, and will give your support to securing appropriations of funds sufficient to complete the planning and to begin construction of the Eagle Gorge Dam.

Passed by the City Council of the city of Renton this 5th day of May 1953.

WILEY CROOK, *City Clerk.*

Approved by the mayor of the city of Renton this 5th day of May 1953.

JOE R. BAXTER, *Mayor.*

MAY 6, 1953.

STATE OF WASHINGTON,
County of King, ss:

I, Wiley Crook, the duly elected, qualified and acting city clerk of and for the city of Renton, Wash., do hereby certify that the attached resolution is a true and correct copy of Resolution No. 852, of the city of Renton, as it appears on file in the records of the office of the city clerk in said city, and as the same was duly and regularly adopted, passed, and approved on the 5th day of May 1953.

In witness whereof I hereunto set my hand and the official seal of the city of Renton, Wash., this 6th day of May 1953.

[SEAL] WILEY CROOK, *City Clerk.*

RESOLUTION SUBMITTED TO THE ASSOCIATED IMPROVEMENT CLUBS OF THE SOUTH END AT THEIR MAY 7, 1953, MEETING, BY ASSOCIATED IMPROVEMENT CLUBS OF THE SOUTH END MEMBER CLUB

Whereas it is considered by the people in the North Pacific area that the completion of the Eagle Gorge flood-control dam on Green River in King County would contribute more to the safety and defense of our country than any other project, and

Whereas the construction of this dam would eliminate future floods; it would provide the necessary factory sites so essential to the defense of our country, and

Whereas other defense industries similar to the Boeing plants could then be located in the Duwamish and Green River Valleys: Therefore be it

Resolved, That the Associated Improvement Clubs of the South End urge the Appropriation Subcommittee of the Senate Appropriations Committee, Washington, D. C., to appropriate sufficient funds to complete the planning and to begin construction of the very essential defense project, the Eagle Gorge Dam; and be it further

Resolved, That copies of this resolution be sent to Mr. Frank J. Beaver, assistant manager of the Seattle Chamber of Commerce.

Done in regular meeting of the executive board of Associated Improvement Clubs of the South End this 7th day of May 1953.

Endorsed:

JUDSON C. COLBURN,
Secretary-Treasurer.
JUDSON C. COLBURN, *Secretary.*

Mr. HANSON. In connection with my prepared statement, since it goes into the record and to save time, unless there are questions, I will not undertake to review these points. If there is a question, I will be glad to answer.

The question was asked as to whether the definite cost report would be available by the 15th of July. It will be available, not as a final detailed plan but enough of a plan so that construction work can be undertaken. Our local engineers, State, county, and port, have carefully followed this job along with the Army engineers and have a fairly clear conception of it. It is our understanding that within this

fiscal year of 1954 and well within that period, enough of the planning can be completed upon which construction can be predicated.

We understand that about $300,000 would be required for final planning, and it is our understanding from the study of the situation that $450,000 can be advantageously expended in construction work during the latter part of fiscal 1954.

We have $2 million of local money available, Senator, which can be used for planning as well as for construction contingent only upon Congress making a commitment for the construction of the project which will cost on 1952 estimates just under $20 million.

REQUEST FOR PLANNING FUNDS

What we ask, therefore, is that your committee provide at least $100,000 of planning funds, plus $100,000 to $200,000 of construction funds. With this commitment by the Congress for construction, the remaining $200,000 of planning money needed and the $250,000 to $350,000 of construction funds required in fiscal 1954 can be supplied from the $2 million already appropriated by our State legislature and King County. Thus the project could be on its way this fiscal year—with a very small outlay by Congress.

GROWTH OF SEATTLE HARBOR

In connection with my prepared statement I showed the committee in the House 3 or 4 pictures which I would like to present to this committee for your consideration. The first one is a Government chart of the Seattle Harbor in 1854. There was nothing there then except the point that they call Seattle. The top of the chart is Smith's Cove and the bottom shows the flats and the Green River coming out into the bay there with the water about 16 feet deep. There is no improvement there.

Here is a picture taken from Beacon Hill about 1893, before the first railroad came in. It shows that area exactly as it was.

This picture, Mr. Chairman, in three parts was taken in 1948. The entire waterfront as shown by the picture has been rearranged, put into modern form, and at the south end it shows the industrial section being developed. It does not take in the entire section, but it takes in enough of it to show very clearly what has been done, and that all that work has been by way of reclamation and also as a local cost except for one short section of the Duwamish waterway which was a Federal project.

This map, Mr. Chairman, was attached to a report that we prepared in 1951, and I shall leave with the committee clerk a number of copies of the committee report. That map shows in color the areas taken by the Government in our industrial section for Government uses since the Korean conflict and prior thereto. The third color in yellow is Boeing's aircraft plant and the Boeing airfield.

In that industrial area of some 3,500 acres, 938 acres have been taken by the Government for industrial uses and at Smith's Cove on the first chart the Government has its naval station with 242 acres.

LAND FOR GOVERNMENT INDUSTRIAL USE

Nearly 1,200 acres have been taken by the Government for Government uses in our industrial area. Now, those locations there like the naval station and the port of embarkation, all of which are familiar to you, Senator, and the Army engineer's location and the Boeing Aircraft, are absolutely essential to the functioning of the Government in that section, and Seattle certainly is a seaport of strategic importance and is deserving of consideration from that standpoint.

When this project started its main concern was the relief of the farmer. It has now come to the point where industry cannot move until that valley is opened up. The State has come into the picture and they say that by reason of the development of the Columbia Basin region and others, the situation has reached the point where there must be more service from the largest industrial center in the State; in fact, in the entire Columbia Basin region. And the last and final point is this question of the need for the Government's protecting its own installations in that industrial area. You heard Mr. Costello's statement and it seems to me that when those facts are taken together we must come to the conclusion that if the Government is concerned in protecting its strategic defenses, it should join with the farmers, join with the city, join with the State, and make a united project for the development of that area. There is no other place to go.

I thank you gentlemen for the time you have given us.

Senator KNOWLAND. Thank you, Colonel.

Does that complete your presentation?

Senator JACKSON. Yes.

Senator MAGNUSON. Your record will be complete here, and I want to say again to the chairman of the committee and to my friend from Louisiana something which I know they appreciate: on other occasions the Senate has approved funds for this project and it seems to me that the need now is more urgent than it has ever been.

Senator KNOWLAND. Thank you, Senators. We were delighted to have both of you here with us today.

The next witness is Mr. William E. Welsh.

NATIONAL RECLAMATION ASSOCIATION

STATEMENT OF WILLIAM E. WELSH, SECRETARY-MANAGER

PREPARED STATEMENT

Mr. WELSH. Realizing the shortness of time, I would be delighted to file a statement and make it a part of the record.

Senator KNOWLAND. You are making a general statement on behalf of the National Reclamation Association?

Mr. WELSH. That is right.

Senator KNOWLAND. Your statement may appear at this point in the record in full.

Mr. WELSH. Thank you.

(The statement referred to follows:)

STATEMENT OF WILLIAM E. WELSH, SECRETARY-MANAGER NATIONAL RECLAMATION ASSOCIATION

My name is William E. Welsh. I am secretary-manager of the National Reclamation Association, an organization representing the western half of the United States. I have held this position for the past 4 years.

The primary purpose of the organization at the time it was organized in Salt Lake City, Utah, in 1932, was "to save reclamation." Although the scope and functions have been broadened considerably during the past 20 years, the objectives as indicated in the constitution remain fundamentally the same—"the development, control, conservation, preservation, and utilization of the water resources of the reclamation States."

The more immediate objectives of our association are set out in resolutions which are adopted each year at our annual meeting. These meetings are always well attended. Last year at our meeting in Long Beach, Calif., we had approximately 1,000 members present. These members came from every State in the West. They are public-spirited citizens who are actively interested in the development of the land and water resources of that area.

Following are a few of the resolutions which have a direct bearing upon the problems which are under consideration by your committee:

"RESOLUTION NO. 5—ADEQUATE APPROPRIATIONS FOR WATER DEVELOPMENT

"Whereas the primary objective of the National Reclamation Association is the complete development of the land and water resources of the West; and

"Whereas the accomplishment of this objective calls for adequate appropriations by the Congress: Now, therefore, be it

"*Resolved*, That the National Reclamation Association hereby directs its officers to support before the Congress requests for sufficient appropriations to

"A. Permit the Bureau of Reclamation and the Corps of Engineers to continue progressive construction programs in consonance with the needs therefore * * *."

"RESOLUTION NO. 15—AUTHORIZATION AND CONSTRUCTION OF PROJECTS

"Whereas the general welfare, safety, and defense of our Nation requires the wise development, conservation, and utilization of the water resources of the reclamation States in periods of national emergency as well as in normal times: Now, therefore, be it

"*Resolved by the National Reclamation Association*, That even during the continuance of the present national emergency—

"1. It favors the necessary appropriations for projects and project units which have been authorized, and which come within the category of a program of reclamation project construction necessary to keep the Nation economically strong and to meet the demands of national defense, and which have met with the approval of the States and localities affected;

"2. It favors the authorization of new projects which meet the tests required by Congress and have the approval of the States and localities affected even though, because of the present national emergensy, it may not be possible to proceed immediately with all phases thereof."

"RESOLUTION NO. 16—CONSTRUCTION BY CONTRACT BUT PERMITTING LIMITED CONSTRUCTION BY FORCE ACCOUNT

"Whereas the National Reclamation Association approves the traditional policy of performance of construction work through the letting of contracts by competitive bidding; and

"Whereas the National Reclamation Association realizes that there are circumstances and conditions, including management and operation, maintenance and repairs, engineering and supervision, minor construction work and emergencies local in character, under which the interests of the public and the Federal Government may be best served by permitting a limited amount and definite type of construction work to be done by force account; and

"Whereas the National Reclamation Association believes that restrictions which have been placed in the Interior Department appropriation bills relating to Bureau of Reclamation construction appropriations upholding the traditional policy of construction by contract but at the same time permitting a limited and necessary amount of work by force account have proven to be, in the main, quite satisfactory: Now, therefore, be it

"*Resolved*, That the National Reclamation Association, reaffirming its position taken in its Resolution No. 12 adopted in 1951, endorses the general pattern set forth in Interior appropriation bills establishing the policy of construction work by contract and limiting and defining the construction work to be done by force account and urges that such a program be made a permanent policy with the Bureau of Reclamation."

"RESOLUTION NO. 28—FEDERAL WATER DEVELOPMENT ORGANIZATIONS

"Whereas in the report of the Hoover Commission recommendations are made for the incorporation of the civil functions of the Corps of Engineers into the Department of the Interior: Now, therefore, be it

"*Resolved by the National Reclamation Association*, That said association, reaffirming its position taken in its Resolution No. 14 adopted in 1951, believes it to be in the national interest that the water development functions of the Federal Government remain in the hands of the existing agencies which now have such functions, and opposes the incorporation of the civil functions of the Corps of Engineers into the Department of the Interior."

BASIN-WIDE MULTIPURPOSE DEVELOPMENT

Today water resource development throughout the West is being considered, planned, and carried forward on a basin-wide multipurpose basis. This we believe is most appropriate. The only way by which we can achieve the ultimate and full development and utilization of the rivers of the West is on such a basis. It is no longer feasible nor advisable to consider each community or individual project separately. Neither can we consider any one of the various phases of a river basin development, such as reclamation, flood control, or navigation without at the same time taking into consideration all of the other uses which must be made of the waters of a river basin. This has already been demonstrated in the Missouri River Basin. It is realized that this is equally true in the Columbia, Colorado, Arkansas, Rio Grande, in fact all of the river basins of the West.

CLOSE COORDINATION NECESSARY

In view of the foregoing, it is becoming increasingly apparent that there must be the closest possible coorindation between the various agencies of the Federal Government. The plans of each agency must be integrated with those of the other agency. We are happy to report that a very great deal of progress has been made in this respect in the West. The reason that I emphasize the necessity of cooperation and coordination is that I wish to point out that those phases of river basin development which properly come before your committee for consideration—flood control, navigation, and power development—must be closely coordinated with the phase of development in which our association is primarily interested in the West—reclamation.

MULTIPURPOSE PROJECTS AFFECT RECLAMATION

There are many multipurpose projects under consideration and in various stages of development in a number of States in the West in which flood control is the major consideration, but which do have a very vital effect upon reclamation and the agricultural development of the area. These projects which are under direct supervision of and construction by the Corps of Engineers do have a direct bearing on reclamation. An outstanding example is the Oahe Dam and Reservoir—a unit of the Missouri River Basin project in South Dakota. We are very much gratified over the fact that the Budget has recommended an appropriation for this very important dam and reservoir. We consider this one of the most important units proposed for the entire Missouri River Basin. It is one of the main-stem reservoirs considered necessary to control the devastating floods of the Missouri River. From a flood-control standpoint alone, this reservoir is of sufficient importance to justify the appropriation recommended, but there are still other benefits which we consider to be of the utmost importance which will come from this reservoir. It will provide irrigation water for the proposed Oahe unit—a tract of 750,000 acres of land in South Dakota. The droughts of the last 2 years have fully demonstrated the tremendous benefits which will come from irrigation in that area. Last summer I was privileged to drive across this vast tract of land on one of the hottest days of the year. In every direction throughout this tract of land the need for irrigation water was evident. On many farms

the wheat yield was as low as 4 to 6 bushels per acre whereas irrigation would have increased that yield to more than 10 times that amount. The Oahe unit is just one illustration of the very close relationship which exists between the proposed flood-control program and the need for continued reclamation development in many of the great river basin developments of the West.

WESTWARD MOVEMENT OF OUR POPULATION

The population of our country is not only increasing at a very rapid rate but it is moving westward. A real impetus to this westward movement in population came from the so-called dust-bowl period of the 1930's, and it is still continuing. The three Pacific Coast States have gained more rapidly in population than any other States in the Nation. The gain in population in the Rock Mountain and arid areas is limited only by the availability of the water supply. Continued development of the water resources in that area is not only necessary because of this increased population but in some communities has become very urgent indeed.

PLANNING AND INVESTIGATIONS

Water-resource development, so vital to the West, cannot move forward in an orderly and progressive manner without adequate planning and investigations in advance.

Everyone realizes that today our Federal budget is under a tremendous strain. We agree with our President that the Federal budget should be balanced. We realize, too, that if we are going to balance the Federal budget it will probably be necessary that there be some reduction in perhaps all of our Federal expenditures. Reclamation, navigation, flood control, and other forms of water-resource development throughout the Nation will perhaps have to undergo some reduction.

We cannot, however, for one moment overlook the fact that we as a nation must remain strong if we are to carry forward with the responsibility of world leadership which is ours today. In order to remain strong, we must not only maintain our present high standard of living, which is the envy of the entire world, but at the same time we must produce adequate food and fiber to provide for the needs of our rapidly increasing population. The development of our great natural resources will do perhaps more than anything else to keep us strong and healthy as a nation so that we may be able to meet the worldwide challenge which is confronting us today.

We are all looking forward with a prayer in our hearts to the day when war will end and there will be peace throughout the world. But, welcome though that day may be, we must not overlook the fact that with a sudden halt to our gigantic defense program and with the boys coming home, we may be confronted as a nation with a problem of unemployment. When that time comes, we must be prepared. We must have a shelf of public-works projects for the development of our natural resources ready to go. These projects must be planned, surveyed, and all specifications completed and ready to let for contract. We all confidently hope and expect that we shall never live to see another devastating financial depression such as the one we experienced in the 1930's. But the best means of insuring against such times of unemployment is to be prepared beforehand.

For these reasons, we strongly urge that adequate appropriations be made available to continue the planning and investigation of flood control, navigation, and other types of water-resource projects.

GULF INTRA COASTAL WATERWAY AND RELATED PROJECTS, LOUISIANA

INTRACOASTAL CANAL ASSOCIATION OF LOUISIANA AND TEXAS

STATEMENT OF DALE MILLER, EXECUTIVE VICE PRESIDENT

GENERAL STATEMENT

Senator KNOWLAND. The next witness is Mr. Dale Miller.

Mr. MILLER. My name is Dale Miller, and I am executive vice president of the Intracoastal Canal Association of Louisiana and Texas, with principal offices in Houston. I appear before you this afternoon to urge your favorable consideration of meritorious river and harbor projects in Louisiana and Texas.

BUDGET RECOMMENDATIONS

The budget now before you recommends an appropriation of $487,000 for the Gulf Intracoastal Waterway, this sum to be allocated to completing the conversion of the Colorado River floodgates into locks. I think it is unnecessary for me to consume your time by a discussion of this item. Since the identical amount was recommended in both the original and revised budgets for the next fiscal year, and since the appropriation is all that is needed to complete this project, I am confident that the subcommittee will recognize the necessity for approving it.

CANALIZATION PROJECT

The conversion of these floodgates into locks, however, will by no means complete the improvements needed on the Colorado River. For a number of years our Intracoastal Canal Association has urged Congress to provide construction funds for the canalization of the lower reaches of the Colorado River. This project, an important and integral part of the Intracoastal Canal system, has been authorized for some years, and the justification for its construction has increased each year. This canalization project would extend 17 miles upstream from its intersection with the main channel of the Intracoastal Waterway to the vicinity of Bay City. It penetrates an area rich in natural resources, principally petroleum, and it would develop, from the moment of its completion, more than sufficient tonnage to justify the relatively low cost of its construction. It would be a tidewater channel, requiring no expensive structures, and it would extend to one of the most rapidly developing areas of the gulf coast the benefits of low-cost water transportation. This project, gentlemen, has been too long delayed, and I urge you to give it your most earnest attention.

OTHER NAVIGATION PROJECTS

I would like to invite your attention to two other important navigation projects, the canalization of the Guadalupe River in Texas and the construction of the Morgan City-to-Port Allen cutoff route of the Gulf Intracoastal Waterway in Louisiana. I shall not discuss these projects in detail, since I am advised that Texas witnesses will appear before you later for the Guadalupe River canalization, and that Louisiana witnesses will likewise testify on the Morgan City-Port Allen route.

In the judgment of the Intracoastal Canal Association, which for nearly 50 years has fostered the development of Louisiana and Texas through water transportation, these projects merit the highest priority in your consideration.

In the consideration of these projects, and others to which I shall refer, it should be borne in mind that the Gulf Intracoastal Waterway is a national transportation facility extending a thousand miles from the west coast of Florida to the Mexican border, and it consists of many integrated projects.

CUTOFF ROUTES

Consequently, the limited time at my disposal does not permit me to do justice to their merits. For instance, there are two cutoff routes of the canal, one in Galveston Bay and the other at Aransas Pass near Corpus Christi, which should be undertaken without delay, and they deserve far more emphasis in our consideration than these brief references would suggest.

Fortunately, the alternate route near Galveston was presented forcefully to this committee last evening, and I earnestly hope that those of you who were not present on that occasion will familiarize yourself with the record on that project. This short alternate route would achieve considerable savings in transportation costs, would eliminate fire and collision hazards which are always present when barge tows are compelled to use the present congested route through Galveston Harbor, and would reduce maintenance costs of the existing channel. The expenditure of only a small amount of money would reap all these material benefits.

A similar cutoff route of the canal at Aransas Pass near Corpus Christi would likewise produce savings in transportation costs, would also reduce navigation hazards in the congested Corpus Christi ship channel, and would have the further advantage of opening up for industrial development a shoreline in the very center of a rich petroleum and chemical area. The cost of these modifications in the Intracoastal Waterway channel is relatively small, but the need for their construction is great.

I cannot refrain from reminding the subcommittee that witnesses for many of these projects have appeared here frequently for a number of years, urging you gentlemen and your predecessors to provide funds to get their construction under way. The significance of their repeated appearances before this subcommittee lies in the fact that in all these years there has never been raised, to my knowledge, any question as to the merit and need of these projects. They simply have been passed over year after year because they represent so-called new construction starts, despite the fact that they are essential parts of an existing waterway which has long since proven its worth and fully justified the cost of its construction and maintenance.

I may say at this point that the Senate has provided funds for some of these projects during recent years, but these amounts have been eliminated in conference.

INTEREST OF VARIOUS ORGANIZATIONS

I suggest to you gentlemen that not only our Intracoastal Canal Association, but many other individuals and organizations throughout the country are deeply concerned over the fact that existing policies of the administration and Congress are seriously retarding the orderly development of navigation projects. For a number of years now the administration has invoked, and Congress has acquiesced in, a policy which denies funds willy-nilly to many important and needed projects solely for the reason that they represent so-called new construction starts, I submit, gentlemen, that such a criterion in the development of a river and harbor program is wholly artificial and unrealistic. Any public works project should be evaluated strictly on its merits, and not on its age.

GROWTH OF LOUISIANA AND TEXAS COASTAL AREA

I am sure you gentlemen are familiar in general with the remarkable growth of the coast country of Louisiana and Texas in recent years. It is rapidly becoming the chemical capital of the world, and scores of multimillion-dollar plants have transformed it from a virtual wilderness into an industrial empire; and a major factor in that development has been water transportation. The Gulf Intracoastal Waterway, for example, was authorized by Congress on the expectation that it would ultimately develop 5 million tons of commerce a year when it was completed between the Mississippi River and the Mexican border, but last year this remarkable waterway carried in excess of 35 million tons of commerce, more than 7 times the maximum amount predicted for it; and all indications point to the prospect that tonnage will increase even more rapidly in the years immediately ahead.

Senator ELLENDER. That increase has been gradual?

Mr. MILLER. Yes, sir, it has. It has been both gradual and rapid, Senator. Actually the 5,000,000 figure which was predicted for the maximum was predicted when the channel had been completed, but the channel was not actually completed on the Mexican border until just 4 years ago, and long before the channel was completed, the maximum amount predicted for it has been reached and surpassed.

I cite that fact to suggest to you gentlemen that authorized modifications and extensions of the Gulf Intracoastal Waterway are much more urgently needed today than they were when they were authorized. In such a rapidly growing area, with such a dynamic economy, transportation facilities must keep pace with progress; and it is patently unrealistic, in my humble opinion, to ignore the merits of authorized projects and pass them over simply because they are construed as new construction starts.

CORPUS CHRISTI NAVIGATION PROJECT

To illustrate the fallacy of such a policy, I would like to call the subcommittee's attention briefly to a navigation project at Corpus Christi, a community which has been described in national magazines as the most rapidly growing city in the United States, having virtually doubled its population every decade for the past 40 years. For a number of years there has been authorized a project to extend the deep-water channel from the main turning basin westward about 5 miles to Tule Lake. A number of important industries have recently located along the route of this authorized channel, and now being constructed just beyond the proposed terminus is the largest refinery in south Texas.

This refinery is 100 percent a defense industry. It is being constructed under a certificate of necessity and it will produce 135-octane gasoline and jet fuel for the exclusive use of our Armed Forces. Production at this 1 plant will exceed 11 million barrels of petroleum products a year, virtually all of which will move by tanker and barge. And yet, merely because the dredging of this authorized project represents new construction, and is thus automatically barred from consideration, this huge refinery is now being compelled to lay several pipelines, each 7 miles long, from its plant through a congested industrial area to reach deep water at the main turning basin in Corpus

Christi. These pipelines will require thousands of tons of steel and will serve only a single industry, and that inadequately, whereas the channel fully authorized would efficiently serve not only that industry but all the other industries located along its route.

Here is a defense industry, producing fuel for jet planes, located near the largest naval air station in the world, and being rushed to completion under a certificate of necessity from this Government, and yet the channel to serve it and the defense program, although fully authorized and wholly justified, evidently cannot be built because it unfortunately happens to be on the arbitrary blacklist of new construction starts. I should think that this Congress would lose no time in expediting the construction of this project, particularly since it is going to be constructed sooner or later anyway, in order that it be made available at the time this refinery is completed in a few months from now.

GOVERNMENT RESPONSIBILITY FOR PROGRAM DEVELOPMENT

Gentlemen, I am sure we are all aware of the need for economy in view of world conditions, but we should be aware also that such conditions will likely prevail over a period of many years to come, and we must not permit them to vitiate our obligation to continue the orderly development of our water resources. The time has come, in our opinion, when our Government should accept the responsibility of working out a program for such development, based solely on merit and need, and not on artificial criteria. Such a program should include not only adequate provisions for new construction starts, but also substantial funds for maintenance and surveys.

We respectfully urge you gentlemen of this subcommittee to develop a selective and discriminating program of useful public works which are indispensable to the growth and progress of our great Nation.

Senator ELLENDER. Mr. Chairman, may I ask a question?

Senator KNOWLAND. You may, Senator ELLENDER.

Senator ELLENDER. Colonel, I notice here that the budget called for $50,000 for planning money only in the alternate roll.

Colonel MILNE. That is correct, sir.

Senator ELLENDER. Will that complete the planning?

Colonel MILNE. That will put the planning in such a status that we could initiate construction, sir.

Senator ELLENDER. I notice also that you have asked for $1,295,000 for construction over ceiling.

Colonel MILNE. Yes, sir.

Senator ELLENDER. You could easily use that with the planning that has been done of the project up to the present?

Colonel MILNE. That is correct, sir. The planning that has been done up to the present time would permit the construction. The planning money that is asked for will simply tidy up the planning and permit us to go further in construction.

Senator ELLENDER. But the planning already done is sufficiently advanced that you could easily spend the amount that you have asked?

Colonel MILNE. That is correct, sir.

Senator KNOWLAND. The next witness is Mr. Fritz Lanham.

TRINITY IMPROVEMENT ASSOCIATION, FORT WORTH, TEX.

STATEMENT OF HON. FRITZ LANHAM, FORMER REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

PREPARED STATEMENT

Mr. LANHAM. Mr. Chairman and gentlemen of the committee, in view of the limitations upon the time, I should like to make a few brief remarks and submit a statement for the record.

Senator KNOWLAND. Your statement may go into the record in full.

(The statement referred to follows:)

TRINITY RIVER PROJECTS

STATEMENT OF FRITZ LANHAM, REPRESENTING THE TRINITY IMPROVEMENT ASSOCIATION

The Trinity Improvement Association, with offices in the Commercial Standard Building, Fort Worth, Tex., is a nonprofit organization interested primarily in safeguarding the Trinity River watershed and protecting its industrial development vital to the progress of our Nation and preventing the devastating effects of periodic floods.

I think it can be clearly shown that local Trinity interests have done more in contributing to these worthy purposes than any similar area in the United States. At their own expense and without either State or Federal aid, those interests began their constructive work and have been solely responsible for 6 major reservoirs and more than 100 levee systems. Reckoned in the value of present-day dollars, they have expended more than $100 million in their local accomplishments.

Naturally, the problem has proved too great for local solution alone and, accordingly, the Federal Government has properly become engaged in this worthy enterprise also. The Trinity people have cooperated and will continue to follow through in meeting all the obligations of their contracts and agreements with the Federal Government even though it will greatly increase their aggregate expenditures.

The reductions in the revised approved budget from the Trinity recommendations in the original approved budget for the fiscal year 1954 are as follows:

Projects	Revised budget	Percent	Original budget	Reduction
Dallas Floodway	$2,150,000	74	$2,900,000	$750,000
Fort Worth Floodway	550,000	36	1,550,000	1,000,000
Garza-Little Elm Reservoir	1,300,000	26	4,950,000	3,650,000
Summary	4,000,000	43	9,400,000	5,400,000

It must be remembered that these three projects are all under construction and that any delay in completing them by retarding the progress of the work will necessarily involve ultimate increase of expenditures. However, we realize the urgency of economy and the balancing of the budget at the earliest possible date, a consummation we all ardently desire. We are anxious to cooperate to every reasonable extent.

Consequently, we will not interpose objections to the reductions of the revised approved budget for the Fort Worth Floodway and Garza-Little Elm Reservoir. We shall do the best we can to expedite the work on these projects with appropriations of the amounts stated in the revised approved budget and will endeavor to make every dollar yield its full value. In this connection, it should be borne in mind that the Trinity local interests are contributing to the Fort Worth Floodway item considerably more money than the Federal Government estimate of its expenditure and that the Dallas people have made very large expenditures in

their own behalf. Though the suggested reductions will eventually increase the cost of the work to both the Federal Government and the local interests and delay the benefits of completed jobs, we believe that, if handled wisely and economically, the proposed reductions for the Fort Worth Floodway and Garza-Little Elm Reservoir may present in the meantime no clearly unjustifiable gamble in human lives and property. In the interest of economy, we would make every effort to have these funds produce the maximum progress and safety such funds could yield through wise and diligent administration.

But the enormous reduction for the Dallas Floodway suggested in the revised approved budget presents a very different and a very serious situation. To extend the time of the completion of that project for another year or two could prove most disastrous, in addition to the increased costs which the Federal Government and the local interests would have to bear. Of paramount importance is the fact that to delay completion of the Dallas Floodway work is to gamble with the lives of 30,000 people whose homes would be invaded by destructive floodwaters if the Dallas levees were to fail. The property loss could easily exceed $500,000,000, including many industrial plants engaged in enterprises of both local and national importance.

I shudder to think what would happen in Dallas if it should be subjected to such a flood as inundated so much of Fort Worth in 1949, which resulted in the loss of 11 lives, the rendering of thousands of people homeless for quite a period of time, and property loss running into many millions. The Dallas Floodway project is designed to prevent an even greater catastrophe.

Dallas cannot have adequate flood protection until the present floodway rehabilitation is completed. By now appropriating $2,000,000, or 31 percent less than the amount stated in the original approved budget, the Congress can make it feasible to complete the Dallas Floodway work with funds to be appropriated a year from now. With wise administration the sum we suggest will keep Dallas work close to schedule and adhere to the letter and intent of the agreements between the local interests and the Federal Government.

We think you will find from an examination of the various budget figures that, if the Congress appropriates the necessary $2,000,000 for the Dallas Floodway, the Trinity allotments would still be reduced considerably more than those of other similar local protection projects of the revised approved budget, which show to be reduced only 22 percent. And, in this connection, it should be remembered that Dallas and other Trinity interests have contributed of their own funds to the essential projects much more than any similar area interested in protecting the lives of the people and the safeguarding of highly important industrial enterprises.

It does not seem to be generally known and recognized that our particular section of the country is one of periodic droughts and floods. Conclusions as to our needs cannot be properly based on conditions of drought. We have been experiencing a period of drought, but now, as you have likely noticed from the papers, the floods have started. That is in keeping with the history of our section. Just as it is wise in times of peace to prepare for war, so it is also wise in periods of drought to prepare to avert the terrible disastrous effects of the subsequent floods. The cost of prevention is very much less than that of providing for such salutary measures as can be taken when the ravaging floods have done their devastating work. Frequently there is no such thing as affording a pound of cure; prevention is the reasonable and logical procedure.

In the interest of true economy and the timely prevention of great loss of lives and property, we beseech you to increase as suggested the appropriation for this one important item of the Trinity projects, the Dallas Floodway.

In the interest of economy we are willing to accede to the other reductions we have indicated and to do all we can to see that the funds are used to the best possible advantage, but, in addition to the essential requirements of the Dallas Floodway project, we would remind you also of the necessity for proper appropriations to assure that preliminary examinations and surveys and the completion of authorized review reports will be provided for in order that highly justified projects for the protection and safety of our country may not be unreasonably imperiled. Many of these authorized actions have been permitted to lag to the detriment of our permanent security. They deserve very prompt and proper attention.

Thank you, gentlemen, for your patient hearing of these important matters.

Mr. LANHAM. I will let the remainder of my time be used by the very distinguished gentlemen from Dallas, Mr. John M. Stemmons, the chairman of the Dallas County Flood Control Board, and the Honorable H. P. Kucera, the city attorney of Dallas.

I represent the Trinity Improvement Association. There are three items in the budget for the Trinity. They are all projects now under construction: the Fort Worth Floodway to which Fort Worth is contributing considerably more than the Federal Government; the Dallas Floodway and the Garza-Little Elm Reservoir to which local contributions are also being made in considerable amount.

REVISED BUDGET

The revised approved budget has rather drastically reduced the amounts in the originally approved budget for these items. However, from the standpoint of the Fort Worth Floodway and the Garza-Little Elm Reservoir, in the interest of economy, we are not urging an increase in those appropriations, and we will try to make every dollar yield its full value in keeping up to the schedule of the projects.

However, with reference to the Dallas Floodway we have a very different situation. The originally approved budget provided $2,900,000 for the continuance of that project. That has been reduced by 74 percent, down to $750,000 in the revised approved budget. Unless that work is carried on to completion as promptly as can be done, this country is likely to suffer one of the most disastrous floods that it has had in a great many years.

EFFECTS OF PROPOSED REDUCTION

I have just this statement in addition which comes from the Honorable John M. Fouts, the general manager of the Trinity Improvement Association, which will be emphasized and amplified by these distinguished gentlemen from Dallas.

Mr. Fouts says:

> Cuts proposed in revised budget for other United States projects similar to Trinity averaged 24 percent. Overall Trinity cut averaged 43 percent with Dallas Floodway receiving cut of 74 percent. We are asking that the revised budget recommendation of $750,000 for Dallas Floodway be increased to $2 million; that is $900,000, or 31 percent below the original budget which would leave Dallas Floodway with cut proportionately about 30 percent greater than that of similar United States projects.

The menace of such a flood has been heretofore accentuated before this committee. In order to get you fully acquainted with the existing situation, I should like to yield the remainder of my time to Mr. John M. Stemmons of Dallas.

DALLAS COMMITTEE FOR THE FLOOD CONTROL DISTRICT, TEXAS

STATEMENT OF JOHN M. STEMMONS, PRESIDENT

LOCAL INTERESTS

Mr. STEMMONS. Mr. Chairman, with your permission, I should like to give you a portfolio which will illustrate the Dallas situation.

The Dallas Floodway was constructed solely by local interests. Flood-control measures in the upper Trinity area have all been done by local interests prior to the time that the Federal Government came in in about 1947. Something in the neighborhood of $100 million

has been expended by local interests in an attempt to harness these floods. The Dallas Floodway itself is simply an integral part.

Senator ELLENDER. How is that spent? Is that spent in building levees?

Mr. STEMMONS. Building levees, flood-control dams, and levees.

Senator ELLENDER. And you have not yet conquered it with this expenditure?

Mr. STEMMONS. That is correct.

Senator ELLENDER. And you expect to do so by the expenditure of about $9 million more?

GOVERNMENT EXPENDITURES

Mr. STEMMONS. Yes, sir. The Federal Government has actually expended, Senator, in the neighborhood of $45 million on the upper Trinity watershed by the building of 4 large reservoirs and 1 floodway system in Fort Worth. The entire Federal Government program contemplates the expenditure of the total of $65 million. $49 million of that has been expended. $5 million would have come in under the budget as set up this year.

Senator ELLENDER. Was any of that $100 million spent by the local people used to develop electricity?

Mr. STEMMONS. It was fully for flood-control purposes. This is an aerial map of the city of Dallas. These levees 13 miles long on either side of this channel, 26 miles of levees were built entirely by local interests in 1929.

This cost borne entirely by the local taxpayers was in excess of $20 million as a coordinated project. No Federal funds have been expended on this, other than the funds that are presently being expended to augment this system. You will find that this project purported to reclaim 10,500 acres in the heart of the city of Dallas. Dallas has one quarter of a million people on this side and 300,000 people on this side of the Trinity River, the two forks coming down here right through the heart. There are 30,000 inhabitants in the flood plain.

Senator ELLENDER. Within the levees?

Mr. STEMMONS. This water that you see in the flood system here is about elevation 400. These 10,000 houses in the area are sitting at elevation 400, so that if we were to have a breach in the system, all of these houses in say a 20-foot break would be under 20 feet of water. There are 10,000 houses, 30,000 people. I am giving you nothing but 1950 United States Census statistics.

FEDERAL HOUSING PROJECT

If you will turn to the second page you will find a Federal housing project of 3,500 units presently being constructed, occupancy to be expected on these units within the next 30 to 60 days, all to be completely occupied within a period of this year. Some 15,000 people will go into those units.

This picture that you see here in front of you, of the 3,500-unit project, shows a project that is costing $35 million. That is Federal money that is being put into that project. That project is right here in the heart of that area.

Senator ELLENDER. Why in the name of common sense did they put it there?

Mr. STEMMONS. For the main reason, Senator, if I may say so, that this project was authorized. It was under construction. This area was a slum area.

If you will look at this next page, you will see the type of houses that were in this area. They did not have sewers or water or anything of that kind. The Housing Authority with Federal funds came in and built 3,500 units that will increase this area to 45,000 people that will live in the area by the end of this year.

There was recommended $2,900,000 for construction this year. The corps has advised that they had contemplated the completion of this project in fiscal 1955. There have already been $55 million of Federal funds expended in addition to that, which has been expended of local funds of upward of $100 million.

Gentlemen, we do not feel that it is good economy to come in at this time and cut this thing down at the end of it when all of these funds were justified primarily on flood control to Dallas and Fort Worth. We submit to you that we need at this time sufficient funds which it has been indicated to us will be $2 million, so that the entire project of the Dallas Floodway can be completed in fiscal 1955. If we just had the $750,000 that has been recommended in the revised budget, it would be impossible to complete in fiscal 1955, because there are some contracts, as I understand, that will take longer than 1 year.

We ask that you give this serious consideration. There are over $500 million of value in this area. We justified that value and submitted it to the Budget Bureau.

I would like to have you hear Mr. H. P. Kucera later.

STATEMENT OF HON. LYNDON B. JOHNSON, A UNITED STATES SENATOR FROM THE STATE OF TEXAS

PREPARED STATEMENT

Senator JOHNSON. Mr. Chairman, Senator Daniel and I are here and want to concur in what has been told you. We have a brief statement that we would like to include in the record.

We urge and commend to you the importance of this project to our State.

Senator KNOWLAND. That statement may go in the record at this point.

(The statement referred to follows:)

Mr. Chairman, I appreciate the opportunity you have given me and these gentlemen from Dallas to present to you the Dallas Floodway project, and what they feel is an emergency requiring the restoration of additional funds to carry this project forward. The Dallas Committee for the Flood Control District is headed by John M. Stemmons, president; H. P. Kucera, city attorney of Dallas; and Hon. Fritz G. Lanham, former Member of Congress.

The original budget as submitted for the fiscal year 1954 proposed $2,900,000 for this project. This has now been revised and cut to $750,000. I am told that cuts in other similar projects averaged about 24 percent, with the overall cuts for the Trinity River averaging 43 percent, whereas the cut for the Dallas Floodway has amounted to 74 percent.

These gentlemen will urge that the appropriation for the Dallas Floodway be increased to $2 million, which would be $900,000 below the original budget estimate and would leave the Dallas Floodway with a cut of about 30 percent which is greater than that of similar projects.

The construction of this project was initiated in January of this year and provides for the strengthening of approximately 26 miles of existing levees. The

area within the levee system totals approximately 10,500 acres in the heart of Dallas, near the confluence of Elm Fork and West Fork of the Trinity River. Important businesses, industries, warehouses, transportation and community facilities and residential property will be protected by the project.

The existing levees and floodways were constructed by local interests during the period 1928–32. Cost of the original project, including rights-of-way, bridges, utilities, etc., has been estimated by local interests at $20 million. The anticipated cost to the Federal Government of the proposed improvement is $8,114,800. During the 1953 fiscal year, the first construction funds in the amount of $1 million were appropriated for the project.

I commend the urgency and importance of this project to you. I hope you may find it possible to increase the funds for this project, because I feel that it should be completed at the earliest date possible.

Senator KNOWLAND. We are glad to have the two distinguished Senators from Texas here today. We will be glad to hear from them orally.

We do have at the moment a slight pressure of time. We have to answer a rollcall, however, we will come back and meet again because the committee may have some questions to raise.

STATEMENT OF HON. PRICE DANIEL, A UNITED STATES SENATOR FROM THE STATE OF TEXAS

GENERAL STATEMENT

Senator DANIEL. I would like to say that I believe that this Dallas Floodway project has been reduced by a far greater percentage than have most of the other similar projects, and we certainly hope that it can be raised. I believe that they are asking for at least a $2 million figure on the Dallas Floodway project.

We hope that you will find it possible to restore the money that is to be appropriated here to more nearly the percentage of decrease that has been applied to other similar projects.

Senator KNOWLAND. Thank you.

The committee will stand in recess, subject to the call of the chairman.

(A short recess was taken.)

Senator KNOWLAND. I would like to say to our witnesses that if they can cooperate with us in expediting these hearings today, it will be appreciated, because we are apt to have a number of rollcalls.

STATEMENT OF JOHN M. STEMMONS—Resumed

Mr. STEMMONS. I would like to clarify some things if I may. The red lines on the map do not indicate the levee itself. The levee is indicated by the blue section here, the levee on two sides and the channel in between. The red lines are the flood lines of the 1908 flood.

Senator KNOWLAND. How long is it since you have had a flood?

1949 FLOOD DAMAGE

Mr. STEMMONS. In 1949, Mr. Chairman, the devastating flood that broke the Fort Worth levees killing about 12 people and causing many millions of dollars worth of damage. It was also a devastating flood in Dallas, but it did not reach our system. We had a much

stronger system, but it was a system subject to such destruction, just as the Fort Worth flood brought.

Senator ELLENDER. Is the money that you are asking to be appropriated for this entire project to be spent within the city limits?

Mr. STEMMONS. Part is within the city limits, Senator, and part is not. Mr. H. P. Kucera, the city attorney will make an explanation about the limits as the majority of these properties were not in the city limits, but have recently been taken into the city limits, and Mr. Kucera will elaborate on that.

You asked about power. Of course there is no power in this at all other than you will find on page 4 which is the picture of the steam generating plant where 70,000 kilowatts is bing added at this point. That in itself is a value of $30 million.

Senator ELLENDER. The $100 million that you said was spent by the local contributions have been spent to build levees, I presume?

Mr. STEMMONS. To build levees and dams; that is correct, sir.

STRENGTHENING OF LEVEES

Senator ELLENDER. And the amount that you are now asking for is to strengthen those levees or build them higher?

Mr. STEMMONS. They want the levees strengthened and we have an interiour drainage problem, the two items which have been authorized by the project.

Mr. LANHAM. You had assurance from the Army engineers that, by the expenditure of this money, the plots with in the city that you have shown us within the flood area will be adequately protected.

Mr. STEMMONS. Yes, sir.

Thank you, gentlemen.

CITY OF DALLAS, TEX.

STATEMENT OF H. P. KUCERA, CITY ATTORNEY

GENERAL STATEMENT

Mr. KUCERA. My name is H. P. Kucera. I am city attorney of Dallas and have been there for 25 years. I saw this project born from its inception.

The land from the red line was all outside the city limits until about 6 months ago, where some 30,000 or 40,000 people were living in those shanties, and when the housing project was started it was outside the city limits.

Senator ELLENDER. Why was it left out?

Mr. KUCERA. The city was powerless to annex, until 5 years ago, any people unless they requested annexation. We are now in the process of spending about $3 million in putting in sanitary sewers and water lines in that area to reclaim it.

On the other side, over here, our city has grown immensely. When this project started in 1925, our city was 250,000. It is over a half-million now.

DRAINAGE PROBLEM

Our inherent drainage problem is a terrific one. As the Lord put the river over there, the natural water drained right in from the high bank into the river. The reclamation project put on the city the burden of building at the city's expense four or five pressure sewers.

The pressure sewer has been designed by the corps and the law has been passed providing that it would be either a pressure sewer or a pump job, whichever the people liked, but the Army engineers said that if the city of Dallas would contribute $300,000 that would represent the difference between the pumping and pressure job. And the city of Dallas paid that money to the corps within the last 3 months, so we have complied with that part of it.

The right-of-way is ready and I want to call to your attention the white lines across there about the upper top. That represents six overpasses, bridges over the river as it now is for the pump to drain on this side. So if the levee would break it would destroy all communications between those towns over there except one. That thing happened about 1947. We had the lower part of the levee of this town side and also of the west side inundated and people could not get across except to one of those places.

LOCAL INTEREST

It occurs to us that the local interests have contributed and have performed their part of the undertaking and to stop now at such a critical moment might destroy many times the $2 million that we are asking for, that this project can be done for. Also, I think the Corps of Engineers will tell you that these two jobs, that the $2 million will get them pretty well under way, will take care of the two most critical jobs from the standpoint of immediate damage to life and property.

Thank you, gentlemen.

Senator KNOWLAND. Thank you.

Prior to the recess, Congressman Wilson of Texas was here. He had to return to the House. Let the record show that he was present.

Mr. STEMMONS. I have other brochures.

Senator KNOWLAND. You might leave them with the clerk of the committee.

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

STATEMENT OF CLYDE T. ELLIS, EXECUTIVE MANAGER

PREPARED STATEMENT

The next witness is Mr. Clyde Ellis. Your statement, Mr. Ellis, may go into the record in full.

Will you summarize before the committee because we are apt to be called before the Senate again on some rollcall votes and we will appreciate that cooperation from you.

(The statement referred to follows:)

STATEMENT OF CLYDE T. ELLIS, EXECUTIVE MANAGER, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. Chairman and gentlemen of the committee, my name is Clyde T. Ellis, executive manager of the National Rural Electric Cooperative Association, which is the service organization of some 934 rural electric systems in 42 States and Alaska, serving approximately 3½ million farm families.

We are here in behalf of several projects that are important to the rural electrification program, but particularly Table Rock and Oahe Dams, both of which are vital to the farmers' power supply. As you know, the administration has requested that Table Rock Dam, in southern Missouri, be stopped. It had originally asked that Oahe Dam in South Dakota be stopped, but has now asked that it continue. I shall return to these two dams in a few minutes.

The rural electric systems separately, collectively, and through their national association board of directors have gone on record urging your favorable consideration of the projects I shall mention.

RURAL ELECTRIC SYSTEMS' POWER SUPPLY NEEDS

During fiscal 1952, some 11,410,044,166 kilowatt-hours passed through the rural electric systems for distribution to farms and other rural establishments throughout America. Of this amount, only 1,555,000,000 kilowatt-hours, some 13.6 percent, was generated by the rural systems themselves. The largest block, 5,750,000,000 kilowatt-hours, representing 50 percent, was purchased from commercial power companies at a cost of approximately $49,311,076. The second largest block used by the rural electrics, 3,205,000,000 kilowatt-hours, or 28 percent of all the power used by them, was purchased from the Federal Government, much of it from the dams constructed by the Corps of Engineers under appropriations authorized by this committee. The Government power cost us approximately $15,626,774. This power is delivered from the dams to the cooperatives and rural power districts over Government transmission lines, over lines constructed by the cooperatives and power districts, and over the systems of the commercial utility companies through so-called wheeling contracts.

Significantly, the average cost of energy purchased by the rural electric systems during fiscal 1952 from Federal multi-purpose dam projects was 4.9 mills per kilowatt-hour, compared to an average cost of 8.0 mills per kilowatt-hour for all power purchased during fiscal 1952, and 8.6 mills per kilowatt-hour paid by our systems for energy purchased from the commercial utility companies.

Continued availability of increasing amounts of energy from these projects is absolutely essential if the rural electrification program is to achieve its goal of area-wide coverage and continued adequate supply in many areas. Relatively speaking, the more easily served portions of the counties or groups of counties encompassed by our systems are already electrified. This is evident from the fact that nearly 90 percent of all farms are served, either adequately or inadequately. However, there are still well over a half million farm families without central-station service in our service areas, mostly in the more sparsely settled section where the terrain is often rough and construction costs higher. REA is finding it more and more difficult to make loans to serve these areas because increased costs of construction combined with the difficult terrain and low consumer density raise some serious questions as to the economic feasibility of these loans. Wholesale power costs are naturally a most important factor in estimating the net return on an investment in electric power distribution facilities. In those areas where the Federal power is available to us, we are, therefore, in a position to push further into the more thinly settled sections and are able to come much closer to achieving complete coverage.

Not only do the rural electric cooperatives and power districts benefit from the power and energy actually delivered to them from the Federal projects, but it is our experience that the mere existence of these projects in a given section of the country invariably brings about general rate reductions on power available to us from other power suppliers as a natural consequence of their desire to hold the farmers' systems as satisfied customers.

Furthermore, in addition to the rate differential which we enjoy by way of direct service from Government projects, and as a result of the rate reduction brought about by the so-called yardstick effect, there is another excellent and possibly even more important reason for our interest in the Federal power program. We are faced in many areas by an apparent actual shortage of power. Each year, this association conducts an annual survey of its member systems and the replies

to our questions, sent out this year on January 1, indicate that 11.3 percent of our systems are experiencing difficulty in obtaining power to meet present loads, and an additional 22 percent are concerned over obtaining sufficient energy to meet system load growth.

FASTEST GROWING INDUSTRY

As you probably know, the electric power industry is growing faster than any other major industry in the United States. In 1900, the total installed capacity of class I electric utility generating plants in the country was about 1 million kilowatts. This had doubled to 2 million by 1905, doubled again to 4 million by 1910, doubled to 8 million by 1916, doubled again to 16 million by 1923, and again doubled to 32 million by 1930. By 1949, the installed capacity had again doubled to 64 million kilowatts, despite a slower rate of increase during the depression of the early thirties.

A chart of the annual increase in installed capacity in the United States, plotted as a function of time, shows that not only has there been, in all years except 1934 a substantial increase in installed capacity, but also that, except during the same depression years, the rate of adding capacity has steadily increased. Despite these tremendous additions to capacity, none of us will forget the practically nonexistent margins of reserve capacity that were available at the end of World War II. Federal Power Commission figures indicate that during the December peak of 1947, there was less than a 2-percent reserve on a national basis, which is an extremely dangerous situation. Since 1947, the commercial power companies have been in an endless struggle to maintain operating reserves at safe levels and to keep up with the tremendously expanding load brought forth not only by the apparently constant state of national emergency, but by the continued natural expansion of industry, especially the electrometallurgical and electrochemical groups.

FPC figures based on estimates of class I utilities indicate that between 1947 and 1955, the dependable capacity of these utilities is more than doubling from 48.1 to 109.8 million kilowatts (see table I attached). FPC estimates also indicate that between 1951 and 1955, the utilities anticipate a 51-percent increase in installed capacity—about the same as was achieved in the preceding 4 years—1947–51. Load estimates, however, indicate that in the years 1951 through 1955, loads will increase 45 percent, compared with a 42.7 percent increase during the years 1947 through 1951.

So, based on the estimates of class I utilities in the United States, we have a situation whereby utilities have been unable to build up an adequate operating reserve usually considered to be 15 percent since World War II, and yet are scheduling additional capacity during the next 4 years at about the same rate as they have for the preceding 4 years, despite the fact that estimated demand for the next 4 years will increase even more rapidly than it did for the preceding 4.

The inevitable result is shown in table I (attached) which indicates that although the utility systems have been able to build up since World War II to a 10.6 percent reserve, which will increase to 12.9 percent in 1954, 1955 estimates indicate the reserve of these systems decreasing to 11.5 percent which is certainly a discouraging trend.

Actually, such low reserves are shortages. In the first place, these figures are averages, not revealing the worst situations. Furthermore, they do not reveal the retarding of power use due to the fact that for more than a decade now, factories have not been built, or have not been built when and where companies wanted to build them because electric power in sufficient quantities was all too often not available.

The power supply demands of the rural electric systems are growing even faster than those of the commercial companies. Theirs are doubling about every 7 to 10 years, ours about every 4 years.

So I think you can see why the rural electric system farmers are disturbed over certain cuts that have been made in the budget requests for funds to continue construction of Federal multipurpose projects that include power facilities. We feel that not only reasonable rate structures for our own systems, but perhaps even the ability of the Nation as a whole to maintain an adequate source of electric energy depends on the Federal development of hydroelectric capacity at as fast a rate as possible.

The requests made by the prior administration for appropriations for construction of hydroelectric projects by the Corps of Engineers involve approximately 5,490,000 kilowatts of capacity which is equal to about 5.85 percent of all capacity owned by the class I utilities in the country at the present time and according

to estimates will be about 5 percent of such capacity by 1955. The rural electric systems of the Nation fully realize the need for balancing the budget and are certainly sympathetic with the new administration's efforts to reduce unnecessary expenditures. We do feel, however, that not only is it impossible to secure a balanced budget by cutting from those items which are designed to increase the productive capacity of the country, but that the benefits from these projects have been in the past, are, and always will be out of all proportion to the funds invested in them. We all know that during World War II our ability to mass-produce airplanes was largely a result of multipurpose dam development on the Tennessee and Columbia Rivers which had been begun years before.

We have listed in table II (attached) certain multiple purpose dam projects together with the money that was appropriated for them for fiscal 1953 as well as the original and revised budget estimates for 1954. We have also indicated the total capacity of each project. The rural electric systems of the country feel that each of these projects is vitally important to the country as a whole, to the area in which it is located, and to the rural people in particular.

ICE HARBOR DAM

Our people in the Northwest are concerned about their prospects of continued power shortage. They are hopeful you will appropriate funds to begin Ice Harbor Dam, already authorized, and for which funds were requested by the prior administration.

TABLE ROCK DAM

Now back to Table Rock and Oahe Dams.

Gentlemen, if this Congress kills Table Rock Dam at least a million farm and urban families will be hurt, many of them badly hurt, in Kansas, Missouri, Oklahoma, Arkansas, Louisiana, and Texas.

Furthermore, if our Government kills Table Rock Dam, already under construction, it will violate its agreement with those people.

Let me show you.

For many years there has been inadequate power available in that area. Rural electrification and other developments have been delayed because of it.

Bull Shoals Dam, 90 miles downstream from Table Rock Dam, was completed last summer. The rural electrics and some municipally owned systems of that area had purchased the bulk of its dependable output. They had purchased it from Southwestern Power Administration which has several other dams on its transmission system. They were designing and building and rebuilding their systems to accept it.

But a little more than a year ago, the defense agencies decided they had to build another aluminum plant. There was not sufficient power available anywhere else in the country so they conscripted Bull Shoals power.

Now the farmers and city folks in the area were agreeable provided Table Rock Dam would be begun and accelerated to completion to make up the deficit. Many conferences were held. Finally all parties agreed. These included defense officials, the Corps of Engineers, congressional leaders, rural electric leaders, the President of the United States, and others.

Table Rock would not solve our power problem, but it, together with its regulatory effect on the downstream Bull Shoals project, would, in time, substantially compensate for the loss of Bull Shoals power.

The President declared Table Rock a defense project and submitted a supplemental budget request for it. The Corps of Engineers and others testified for it. The people of the area came to Washington en masse for it. Congress appropriated $3 million to begin it.

And Table Rock was started. I was there for the ground-breaking ceremony in October. Congressmen Dewey Short and Jim Trimble were there. Incidentally, that section is home to me, and I can tell you from personal knowledge that the people are practically all for it—farmers and merchants, Republicans and Democrats.

Some wondered whether, if Eisenhower were elected, the Table Rock Dam might be stopped. Congressman Short and others assured the folks that Table Rock would go forward. Both the Republican platform and General Eisenhower had promised that the river-development program would go forward.

Our people were convinced and proceeded to reshape their building and other plans, looking forward to Table Rock power.

Eisenhower carried all counties in that immediate area, as I recall, in Missouri, Kansas, Oklahoma, and Arkansas.

To say that the people in that area were shocked, embarrassed, and disappointed when the Eisenhower budget asked that Table Rock Dam be killed is to put it mildly.

OAHE DAM

The other project in which we are particularly interested is the Oahe Dam on the Missouri River in South Dakota, the key dam in the comprehensive development of the Missouri.

We are aware of the fact that, while the administration had originally requested that construction of Oahe Dam be stopped, it has now sent up a supplemental request asking that it be continued.

Rural electric systems in North and South Dakota, as well as those in nearby Nebraska, Minnesota, and Iowa, are looking forward to the availability of low-cost Missouri River hydroelectric energy, and many of our systems have been and are being designed to accept delivery of Missouri Basin hydroelectric energy as soon as it becomes available. We are informed by the Corps of Engineers that, although the Oahe project is designed for an installed capacity of 170,000 kilowatts, the effect of a delay in its construction on power production on the main stem of the Missouri would be out of proportion to the proposed appropriation cut. We are told by the Corps of Engineers that on the stream reregulation at Oahe will depend 50 percent of the dependable capacity and one-third of all energy produced on the river. Last year an 80-percent reduction of funds for construction of this project was imposed by the House, most of which was restored in the Senate. During the Senate hearings it was testified by the Corps of Engineers that, were the reduction contemplated at that time carried through, embankment placement would be seriously endangered by high water, a 1-year delay in completion would almost certainly result due to the impossibility of closing the river, land acquisition would be delayed, and large amounts for power would be lost which would otherwise be produced at Oahe during the period equal to the length of a shutdown.

In addition, large amounts of power would be lost at Garrison and Fort Randall Dams due to lower heads, and the smaller Fort Randall Reservoir would be exposed to a high-sedimentation rate which will be prevalent there prior to the closure of Oahe. It was also testified that delay in completion of Oahe would also mean an increase in the calculated risk being taken with the spillway at Fort Randall, the capacity of which is predicated on Oahe regulation.

CONCLUSION

In conclusion, gentlemen, we of the rural electrics thank you for your consideration of their needs and interest in connection with these several projects.

We urge you to appropriate funds to begin Ice Harbor Dam and keep the other projects going at maximum efficiency, including Oahe and Table Rock. We hope you can accelerate Table Rock.

TABLE I.—*Peak demand and dependable capacity of class I utilities in the United States* [1]

Year	Peak demand	Dependable capacity	Percent of reserve	Year	Peak demand	Dependable capacity	Percent of reserve
1947	47, 554, 537	48, 146, 326	1. 24	1953	[2] 84, 487, 999	[2] 93, 456, 938	10. 6
1951	67, 869, 836	72, 687, 954	7. 1	1954	[2] 92, 174, 620	[2] 104, 050, 238	12. 9
1952	76, 511, 398	80, 944, 938	5. 8	1955	[2] 98, 478, 143	[2] 109, 792, 738	11. 5

[1] Federal Power Commission Electric-Power Statistics.
[2] Estimates by FPC based on reports of class I utilities.

Between 1951 and 1955, dependable capacity is anticipated to increase by 51 percent:

$$\begin{array}{r} 109,792,736 \\ -72,687,954 \\ \hline 37,104,784 \end{array} \qquad \frac{37,104,784}{72,687,954} = 51 \text{ percent}$$

Between 1951 and 1955, anticipated peak load increase equals 45 percent:

$$\begin{array}{r} 98,478,143 \\ -67,869,836 \\ \hline 30,608,307 \end{array} \qquad \frac{30,608,307}{67,869,836} = 45 \text{ percent}$$

Between 1947 and 1951, dependable capacity increased by 51 percent:

$$\begin{array}{r} 72,687,954 \\ -48,146,326 \\ \hline 24,541,628 \end{array} \qquad \frac{24,541,628}{48,146,326} = 51 \text{ percent}$$

Between 1947 and 1951, peak load increase equals 42.7 percent:

$$\begin{array}{r} 67,869,836 \\ -47,554,537 \\ \hline 20,315,299 \end{array} \qquad \frac{20,315,299}{47,554,537} = 42.7 \text{ percent}$$

TABLE II.—*Army civil-functions appropriations for fiscal year 1954*

	Appropriated, fiscal year 1953	Truman budget, 1954	Eisenhower budget	Total kilowatt capacity
Blakely Mountain Reservoir, Ark	$4,902,077	$6,000,000	$5,500,000	75,000
Bull Shoals Reservoir, Ark.-Mo	1,270,000	2,000,000	2,000,000	160,000
Folsom Reservoir, Calif	13,370,870	14,800,000	9,800,000	160,000
Jim Woodruff lock and dam, Florida, Georgia, Alabama	10,145,873	10,400,000	7,900,000	30,000
Buford Dam, Ga	2,699,569	9,100,000	8,500,000	86,000
Clark Hill Reservoir, Ga.-S. C	5,144,256	2,250,000	2,250,000	280,000
Albeni Falls Reservoir, Idaho	7,352,528	7,700,000	7,200,000	42,600
Table Rock Reservoir, Mo.-Ark	2,950,646	10,800,000	0	84,000
Gavins Point, Nebr.-S. Dak	7,644,858	17,800,000	12,100,000	100,000
John H. Kerr Reservoir, Va.-N. C	7,725,244	1,450,000	1,450,000	204,000
Garrison Reservoir, N. Dak	30,712,565	39,000,000	31,000,000	240,000
Tenkiller Ferry Reservoir, Okla	2,110,404	300,000	200,000	34,000
Detroit Reservoir, Oreg	10,180,470	1,275,000	0	115,000
McNary lock and dam, Oregon-Washington	53,451,165	28,185,000	27,700,000	980,000
Lookout Point Reservoir, Oreg	13,544,887	20,375,000	20,000,000	129,000
The Dalles Dam, Oreg.-Wash	19,584,400	58,400,000	37,429,000	1,092,000
Fort Randall Reservoir, S. Dak	31,697,198	22,700,000	14,700,000	320,000
Oahe Reservoir, S. Dak	2,961,189	14,800,000	8,250,000	170,000
Cheatham lock and dam, Tennessee	5,070,480	5,835,000	4,835,000	36,000
Old Hickory lock and dam, Kentucky-Tennessee	9,848,880	18,000,000	12,600,000	100,000
Chief Joseph Dam, Columbia River, Wash	19,027,465	30,000,000	25,000,000	1,024,000
Ice Harbor Dam, Wash.[1]	0	4,900,000	0	195,000

[1] New start.

Advance planning funds:

Appropriated for fiscal year 1953	$1,300,000
Requested for fiscal year 1954	3,500,000
Revised budget, fiscal year 1954	3,000,000

NOTE.—This represents a total installed capacity of approximately 5,490,400 kilowatts.

(Subsequent to the hearings, the following letter was received from Mr. Clyde T. Ellis:)

MAY 21, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Senate Appropriations Committee,
Senate Office Building, Washington, D. C.

DEAR SENATOR: The purpose of this letter is to request your permission to make the following short supplemental statement to my statement of Tuesday, May 19, regarding multipurpose dams needed to assist in the power supply of the respective areas.

First, I would like to offer the following telegram from Walter Harrison, manager of the Georgia State Association of Rural Electric Cooperatives, 41 of them serving more than 200,000 farm families:

"We believe that it is most important and very urgent that NRECA give us a hand in the matter of getting Hartwell Dam under construction. As you doubtless know, Hartwell Dam is the best cash register on the Savannah River. It will lend greater value to the Clark Hill development and the atomic-energy installation below Augusta than any other single item that we know anything about.

The Georgia rural electrics are wholeheartedly back of the Hartwell Dam development and urge you to testify in its behalf."

I believe the general statements I made to your honorable committee would apply equally well to Hartwell Dam. We think it is a good project; it was once recommended for immediate construction, and we would like to see it begun.

Sincerely,

CLYDE T. ELLIS,
Executive Manager.

GENERAL STATEMENT

Mr. ELLIS. Thank you, Chairman Knowland. I will be happy to do that.

For the record, my name is Clyde T. Ellis, executive manager of the National Rural Electric Cooperative Association, representing 934 rural electric systems of the United States and Alaska who in turn are serving about 3½ million farm families and rural establishments.

I would like to call your attention, gentlemen, to a few figures. First apologizing for burdening you with figures, but we think they are important in their picture.

TABLE ROCK AND OAHE DAMS

I am going to talk about Table Rock and Oahe Dams, particularly.

I would like to read a paragraph of this statement.

During fiscal 1952, some 11,410,044,166 kilowatt-hours passed through the rural electric systems for distribution to farms and other rural establishments throughout America. Of this amount, only 1,555,000,000 kilowatt-hours, some 13.6 percent, was generated by the rural systems themselves. The largest block, 5,750,000,000 kilowatt-hours, representing 50 percent, was purchased from commercial power companies at a cost of approximately $49,311,076. The second largest block used by the rural electrics, 3,205,000,000 kilowatt-hours, or 28 percent of all the power used by them, was purchased from the Federal Government, much of it from the dams constructed by the Corps of Engineers under appropriations authorized by this committee. The Government power cost us approximately $15,626,774. This power is delivered from the dams to the cooperatives.

Senator ELLENDER. What percentage was that?

Mr. ELLIS. About 28 percent.

Senator ELLENDER. What was the other percentage?

POWER PURCHASES FROM COMMERCIAL COMPANIES

Mr. ELLIS. From the commercial companies we purchased about 50 percent costing us $49 million plus.

This power is delivered from the dams to the cooperatives and rural power districts over Government transmission lines, over lines constructed by the cooperative and power districts, and over the systems of the commercial utility companies through so-called wheeling contracts.

GROWTH OF ELECTRIC INDUSTRY

The electric industry, as you know, is by far the fastest-growing major industry in America. It is almost incomprehensible how fast the electric industry is growing. No other major industry approaches it at all.

According to the Federal Power Commission and the Defense Electric Power Administration, the electric industry is doubling its facilities and doubling its supplies in about 6, 7, to 10 years. That simply means, gentlemen, that every 7 years to 10 years the whole power facility of this country has redoubled. It is being done and must continue. You can only get so much power through a line or generator of a certain size, and we must continue to expand.

My point there is that apparently the maximum effort of the utility industry, the Federal Government, and of all other producers of power simply will not be enough. We continue to lag behind the demand. The figures from the Federal Power Commission indicate that there is going to be less reserve in the next few years than in the past, and this thing called reserve is a sort of misleading thing anyway. For instance, I do not know where an industry could find say 50,000 kilowatts of power anywhere today. The figures can only show the demand of load already connected. They cannot show the demand of those waiting for service.

When big blocks of power have had to be had, as you know, for industries in your States, that power has had to be either purchased from some dam which is coming into production within the area, or the new generators have had to be built by the industry to supply the power. About one-fourth of the rural-electric systems in the country today are in difficulty on power supply. That is not any guess. It is their own estimate from a survey which we made.

Now, that may not be supply for the whole system. It may be in certain areas of the system. They need additional substations for better voltage regulation and additional capacity which they do not have and cannot get because there are no lines in there to deliver them power.

DIFFICULTIES IN SOUTHWEST

In the Southwest, we have one of the most difficult situations in the country, and it has to do with Table Rock Dam which is now before you. As I believe you know, about a year ago a number of people from that area came before you including the rural electrics and pleaded that construction on Table Rock Dam be started. One of their reasons and the principal reason, was that the power which they had already purchased out of Bull Shoals Dam, 90 miles downstream on the White River had been conscripted by the Government after they had purchased it and laid their plans to accept it and built their line and made expenditures that were to them vast sums in preparation to receive that power. It was taken for the aluminum plant at Arkadelphia, Ark.

I used the word "conscription" figuratively, because the cooperative did agree to it. Some of the representatives of the rural electrics sitting here in this room now agreed to that power being taken from them because they, of course, wanted the defense to go ahead, and because they understood that the Army engineers would then recommend to this committee the beginning of Table Rock to replace that power. It could not be replaced in toto and it could not be replaced in time, but it would be replaced some 4 or 5 years later in the major part.

DECLARED A DEFENSE PROJECT

With an understanding on the part of Senator McClellan and others in the Congress that they would push for the beginning of Table Rock Dam to replace that power taken from them at Bull Shoals, and with the understanding of Federal officials of the executive department including the President that they would urge the construction of Table Rock Dam, the President then did declare it a defense project. The Congress appropriated the money and Table Rock was begun. I was down there for the celebration of the beginning of it last fall when the wheels started turning.

It is true that they have not done a lot but it is under construction and as a result of that, gentlemen, and this may be old to you and you may have heard some of this from some of the rural electrics, several of the rural electric systems of this area have again started rebuilding their systems or redesigning their systems to accept Table Rock power.

Now, this is a map of the Southwestern Power Administration area and the Southwest, showing generally Missouri, southeast Kansas, all of Oklahoma, southeastern Texas and all of Arkansas and all of Louisiana. On this map we show the dams that have been built by the Corps of Engineers and the major transmission line of the Southwestern Power Administration connecting most of them. Here in north central Arkansas is the Norfork Dam completed and in production, Bull Shoals Dam completed about a year ago and in production. The Norfork Dam is on the north fork of the White River and Bull Shoals is on the White River. The Denison Dam is on the Red River between Oklahoma and Texas. Those are all in an interconnected system.

The Narrows Dam in southwest Arkansas has been completed and is in production.

Then these dams are shown on the map under construction: Fort Gibson in southeastern Oklahoma; Tenkiller Ferry in southeastern Oklahoma; Blakely Mountain in southwest Arkansas, and Table Rock in southern Missouri; Table Rock also being 90 miles or so upstream from Bull Shoals.

Principally through five generation and transmission cooperatives in Missouri, southeast Kansas and eastern Oklahoma, and through the private power companies, by wheeling contracts in Oklahoma and Texas, 1 million farm people are dependent upon this power more or less of the SPA area—power developed by the Corps of Engineers. About a quarter of a million farm families, gentlemen, are dependent now upon this Table Rock power that I am talking about.

NEED FOR TABLE ROCK

If Table Rock Dam is stopped, one-quarter of a million farm people in a six-State area there will suffer because of lack of power supply. They are already short. There are thousands of farmers not yet served at all in that thinly settled mountainous area, and in some of the area not in the mountains, partly because they have not had power supply in adequate quantities in the areas where the substations would have to be located.

As you know, the new budget request omitted Table Rock Dam. We have hope that a new budget request is coming up, containing a supplemental request.

Oahe Dam on the Missouri was omitted. It is also under construction. It was omitted in the first budget request of this administration, but a supplemental request was sent up a few days ago containing $8¼ million for Oahe. We are hoping that something like that will happen to Table Rock.

REPRESENTATIVES OF LEGISLATIVE COMMITTEE

I would like at this point to introduce to the committee and let the record show that they were present, representatives of our legislative committee, elected from the regions affected by these dams.

They are here primarily appearing before the Agricultural Subcommittee, but were interested in this committee and came in here: Mr. P. J. E. Peterson, of Minnesota, representing Minnesota and the Dakotas; Floyd Gibson, of Oklahoma, representing Missouri, Arkansas, and Louisiana. Some of the others have stepped out. They are N. C. (Jack) Wagers, of Colorado, representing Kansas, Colorado, Wyoming, and Nebraska; Tom Hurd, of Texas, representing so far as this area is concerned, the State of Texas and some other States to the West.

CAPACITY OF TABLE ROCK

In the prepared statement which we have filed here, we have listed in the last sheet the capacities of these various dams, and we have shown Table Rock Dam with a capacity of 84,000 kilowatts of power. We did not show here something that is also very important, and that is that it would give us 13,400 kilowatts of increased capacity downstream at Bull Shoals Dam so that we would get greater benefit out of Bull Shoals Dam which is already built if Table Rock is also built.

Likewise the Oahe Dam in the several-State region of the Dakotas, Minnesota, Nebraska, and northwest Iowa, would supply badly needed power for much of the rural electric program in that area at a very much lower rate than they are able to generate power for in that area now. So it would help us tremendously both in supply and in the saving to the farm people.

Mr. Peterson here and his group were before the Interior Subcommittee last week pleading for a transmission line to bring power around into western Minnesota that would save them $1-million-plus a year, if they can get the Missouri Power in that area.

ICE HARBOR DAM

The people in the Northwest are concerned about Ice Harbor Dam because, while they are not suffering at the moment in any particular area that would be affected by the Ice Harbor power supply, there is general shortage out there and they fear that if Ice Harbor is not built they will suffer, that the demands of the defense plants in that area, including aluminum and including atomic energy and of other uses, will call upon the power supply to the extent that there will not be enough available to the farm areas of the Northwest. They say that they believe that the Bonneville Power Administration is about five Bonneville dams behind in its construction program out there, and they would like to see the next best that is now available to you, and I say that because I think they would prefer Hells Canyon as the next but cannot get it. I believe that is my statement, sir.

Senator KNOWLAND. Thank you, Mr. Ellis.

CALUMET HARBOR AND RIVER

RAIL AND WATER TRANSFER CORP., CHICAGO, ILL.

STATEMENT OF LEO M. GEISSAL, PRESIDENT

GENERAL STATEMENT

Mr. GEISSAL. Mr. Chairman and members of the committee, I am appearing here as an official of Rail and Water Transfer Corp. of Chicago. I am president of Rail and Water Transfer Corp. Our corporation is composed of 28 stockholders, all of whom are coal operators from the States of Illinois, Indiana, and western Kentucky, known as the producers of midwestern coals. Our dock is located on the Calumet River in Chicago and transfers the coal from the railway cars into the lake ships for lake destinations, particularly Lake Michigan and Lake Superior.

LEGISLATIVE AUTHORIZATION

House Document 494 of the 72d Congress, 2d session, dated August 30, 1935, provides for the widening of the Calumet River with the dredging to be done at the expense of the Government when the necessary lands for the widening are donated by the adjoining landowners.

The widening provided in the House bill recognized a very bad angle below our point of operations which creates a very serious hazard to all forms of navigation, particularly when the ship is tied up at our dock and another ship is tied up at the American Ship Building dock directly across from us.

I have a couple of photographs which I would like to show you to give you some indication of that hazardous condition in the Calumet River at our point of operation. In other words, it is very difficult to negotiate a ship by or through the channel when a ship is at our dock and when it is directly across from us.

We have a frontage of 500 feet and the Chicago-Western Indiana Railroad immediately to the south has 1,000 feet of river frontage. At present because of the physical conditions of the property we can only arrange one loading tower on the property.

LOADING TOWERS

The increased tonnage to be handled through the port of Chicago necessitates the installation of two loading towers.

Anticipating this we filed an application with the district engineering office in Chicago for a permit to establish new channel and dock lines along the westerly bank of the Calumet River between 100th Street and what we know as dock No. 2. That permit was granted to us and was also approved by the Chief of Army Engineers in Washington, D. C. All coverage heretofore has been on the basis of a temporary permit.

In other words, because of the widening program, contemplated for the Calumet River, whenever we attempted any improvement the Government engineer would only give us a temporary permit. We plan to spend some $3,850,000 on improvements to our dock facilities,

and, of course, you understand that we cannot possibly go in and spend that money on the basis of a temporary permit. So we will spend $550,000 on a new dock wall and $3,300,000 on new plant and equipment.

LAND DONATED

The lands that we are donating for the widening have a value of $66,000. The cost of dredging involved according to government estimates as late as September 1952, is $110,000. We kindly request this appropriation for the 1954 fiscal year because we must have our plant in operation by the first of April, 1954.

Ours is strictly a seasonal business and we only operate from about the 1st of April until the 1st of December, and all construction work has to be done through the winter months.

So, if we do not get an appropriation for $110,000 to do this dredging, the new channel lines cannot be established, the new dock wall cannot be built, the serious navigation hazard cannot be eliminated, and it means curtailment of the general business to the port of Chicago, insofar as coal transfer is concerned.

I have a map that I would like to show you as to how this widening would take place. This is the present channel line, this blue line. This is the present dock line and this is where we have one tower located at the present time, and when we are loading the stern end of that ship extends out into the center of the stream.

Our proposed layout calls for removing this entire angle in the river, moving it upstream, moving back at this point, 90 feet, moving back 170 feet at this point. This shows that there is considerable land in there but that land is eroded so that there is very little drainage to be done here and also there.

TOTAL DREDGING

The total amount of dredging is only 60,000 cubic yards at a cost of about $110,000.

That is my story.

Senator KNOWLAND. Thank you very much.

(See also p. 1877.)

The next witness is Mr. Anthony W. Smith.

TUTTLE CREEK PROJECT

CONGRESS OF INDUSTRIAL ORGANIZATIONS

STATEMENT OF ANTHONY W. SMITH, ASSISTANT GENERAL COUNSEL

GENERAL STATEMENT

Mr. SMITH. My name is Anthony W. Smith, assistant general counsel of the national CIO and I am executive secretary of the CIO committee on regional development and conservation.

I want to say a few words with regard to the Tuttle Creek Dam out in the State of Kansas.

I represent here not only the national CIO but also our State and city organizations in that area; the city organization of CIO in Kansas

City; also in Topeka; also in St. Louis; and the State organizations of the CIO in Missouri, Kansas, Nebraska, and that entire area.

I should point out, I suppose in starting that essentially we are downstream people. That is, we are located in cities.

Our members were washed down the river, so to speak, literally as a matter of fact in 1951 and again in 1952 in a somewhat different place, and the plants at which they worked were shut down and in some cases the companies announced that they were not going to open up again.

AMOUNT OF DAMAGE

Our conservation committee, of which I am secretary, went out to the area of the flood damage in Kansas City and on the Kaw River in June of 1952, last year. We looked particularly at damage that had been done in the previous year by the big flood that came down the river, and there is no question but what something has to be done about these floods. I think that everyone agrees on that.

We looked at the damage done also on the lower Kaw River where sands to the depth of 2 and 4 and 6 feet had been deposited on rich farmlands which had to be restored by the use of these 4-foot draft plows, and it is very apparent that something has to be done.

The question is what? We met with the farmers in the Blue River Valley and the Blue River, as perhaps you gentlemen know, is a tributary of the Kaw; the Kaw is a tributary of the Missouri River; and we saw the damage done in the Blue River Valley also.

QUESTION OF LOCATION

Now, the question is whether the method of handling this problem is to build the Tuttle Creek Dam near the place where the Blue River runs into the Kaw, or whether it is a matter of going to the Blue River Valley and putting into effect the kind of program that the Department of Agriculture recommends; and as a representative of city people who have definite interests at stake down river, we are firmly on record in opposition to the Tuttle Creek Dam. We think it is absolutely inexcusable for the Government of the United States to roll the waters of a reservoir over the community and farms and people and cemeteries and churches, and all the community facilities and all the rest of it in the area in the Blue River Valley.

OBJECTION TO PROJECT

We have wired all members of the committee. We have used some fairly strong language about it. We said we felt it was brutal and stupid. I came up to testify personally, to supplement that by a personal statement we consider it brutal and stupid. Stupid because you do not take American communities, 12 or 15 towns, out of the Blue River Valley and submerge them under water and say goodbye to everything they have stood for for a hundred years.

Brutal because you just do not go out there and put people's farms under water in that fashion and destroy everything that an area like that means in the way of food production, the lives of hundreds of thousands of people.

It is stupid because it means the destruction of a lot of very valuable farmland. Hundreds of good farms, the richest farms in the State of Kansas, the richest farms in the United States in that respect, are to be put under water to prevent some occasional inundation of some of the slum properties in Kansas City.

Some of our people live in Kansas City. It is our suggestion that we move them out of the river basin in Kansas City. It is our suggestion that we widen that basin and let the river flow through a wider channel, as has been recommended by engineers who have made a study of the matter for the Governor of the State of Kansas. It makes a lot of sense. That part of the city is not fit to live in anyway. It is a slum district, the most rundown kind.

We are satisfied if we go out in the Blue River Valley and put into effect the kind of program that the Department of Agriculture has recommended, we can prevent floods. Not only preventing floods but increasing agricultural production, increasing the wealth of the country, increasing agricultural production in that area 25, perhaps 35 percent.

We could go out there and use this money that would otherwise be thrown away on this dam to help the farmers get their fields and proper agricultural methods, with terraces, contour farming, changing over to grass, reforestation, the whole program of measures on land which will hold the water there and let it sink in and restore the underground water tables and replenish the springs.

To the extent that was not sufficient to hold all the excessive runoff, we would go out there and, giving aid to the water conservation districts and watershed associations that are being set up, we would construct thousands of small detention basins out on the land to hold the water back for as long as 72 hours without injuring the grass so that you lose nothing in the way of agricultural land or agricultural resources by that method.

In fact, you improve the condition of the land.

CHECK DAMS

If that were not enough, we would add some small check dams farther down the upper parts of the tributary.

We have been concerned with this flood-control problem for many years. We have studied it carefully. We have endeavored to learn about it as a technical proposition. We have considered it as a matter of interest of the people in our cities, getting protection from floods and the interest of people from the watershed in avoiding having their property flooded out.

We think that the agricultural method is the right method and the big dam approach to flood control is outmoded and archaic and we intend to fight it not only in the Tuttle Creek area but everywhere else.

We are going to work for the agricultural approach to flood prevention. I think the cost will be very definitely lower by this method. If you build a big dam, you are going to have to go out on the watershed anyway and do this land-treatment program; otherwise, the dam will float up. You have lost your investment; you have ruined your land. It will be necessary to go out in the watershed and do the watershed-treatment operation anyway.

If you do that first to prevent floods by that method, you do not have to have your base structure.

We certainly want to lend our weight to that of the Farm Bureau, the Farmers Grange, and all the local organizations representing downstream city interests.

We want to see this job done by holding the water up where the rain falls. We are opposed, and will continue to fight, Tuttle Creek Dam.

Senator KNOWLAND. Thank you very much.

The committee will stand in recess until tomorrow morning at 10 o'clock.

(Whereupon, at 4:15 p. m., Tuesday, May 19, 1953, the committee recessed, to reconvene at 10 a. m., Wednesday, May 20, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY APPROPRIATIONS FOR 1954

WEDNESDAY, MAY 20, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, at 10 a. m., pursuant to recess, in room F-39, the Capitol, Hon. William F. Knowland (chairman of the subcommittee) presiding.

Present: Senators Knowland, Cordon, Ellender, and Holland.

CIVIL FUNCTIONS

LOUISIANA-TEXAS INTRACOASTAL WATERWAY

STATEMENT OF ERNEST D. WILSON, PRESIDENT, GREATER BATON ROUGE PORT COMMISSION, BATON ROUGE, LA.

PLAQUEMINE-MORGAN CITY ALTERNATE ROUTE

Senator KNOWLAND. The committee will come to order.

I might say for the witnesses this morning that their complete statements can go in the record, and then they can either add or give additional information which they feel will be helpful to the committee, but your complete statement will be published in the record.

Our first witness is Mr. Ernest Wilson.

Mr. WILSON. I might say, Mr. Chairman, that our statements have been very well condensed.

Senator KNOWLAND. All right, you may proceed.

Mr. WILSON. My name is Ernest D. Wilson, of Baton Rouge, La. I am here in my capacity as president of the Greater Baton Rouge Port Commission, a new Louisiana State agency, charged with construction and operation of new deep-water, public-port facilities in the Greater Baton Rouge area. Concurrently, I am also chairman of the State board of commerce and industry, Louisiana's agency for coordinating industrial growth. In private business, I am president of Dunham-Wilson Co., of Baton Rouge, steel fabricators and distributors. I assure you of my deep appreciation for the opportunity to discuss the matter at hand.

PROJECT AUTHORIZATION

I urge upon you every possible assistance to the project known as modification of the existing project for the Plaquemine-Morgan City route of the Gulf Intracoastal Waterway, as outlined in House Docu-

ment 242, 79th Congress, 2d session. Improvement of this old alternate route of the Intracoastal Canal, which is not a new route in any sense of the word. It is an authorized project, has advanced through the planning stage, and is now urgently in need of construction funds.

I invite your attention to this sketch [indicating] for a brief summary of this project. The Morgan City-Plaquemine route of the Intracoastal Canal starts at Morgan City, at the lower left corner of the map, and goes north to enter the river at Plaquemine, La. Present size of the route is 9 feet by 100 feet in width. The locks at Plaquemine are 260 feet long by 55 feet wide, with a 10-foot sill. The project in question would improve the channel to 12 by 125 feet, the same as the rest of the Intracoastal Canal.

Additionally, it would depart from the present route at Indian Village, and by means of a new land cut enter the Mississippi River at Port Allen, across the river from Baton Rouge, with new and adequate modern locks 84 by 1,200 feet. The present route between Indian Village and Plaquemine, a distance of 8 miles, including the locks, is so tortuous as to practically nullify its use as a modern water transportation artery.

SAVINGS POSSIBLE

Statistically, the alternate route savings for tows, south and west bound on the river and canal, and also east and north bound on the canal and river, is as shown on the map—a distance of 168.9 miles. This savings is the difference represented by use of the alternate route instead of the longer route which enters the river at Harvey lock at New Orleans.

I would like to emphasize two main points:

One, the savings in distance, time, and money offered by the alternate route is not available to most water transport at present, due to the condition of the project.

NEW PUBLIC PORT FACILITIES

Two, and my main point, there is a new and major reason why this construction should be started at once—and that is the new public port facilities of Greater Baton Rouge. Bonds for this project will be sold this coming October, and we plan to let our first construction contract by next January 1.

ESTIMATED COST

Senator KNOWLAND. What is the total estimated cost?

Mr. WILSON. I believe it is estimated by the Army engineers at $24 million.

The proposed port area of Baton Rouge is shown in gray with the new alternate route of the intracoastal coming into the red at Port Allen.

Senator LONG. If I might interrupt, the construction of the Baton Rouge port is not an additional cost ot the Government, you simply want your port and will develop that area when the project is completed?

Mr. WILSON. That is true, Senator. The gray area is the port area to be developed by the State of Louisiana.

Senator LONG. Your plans to develop the port were made after the Government proposed to bring the canal through that point?

Mr. WILSON. That is true, sir.

PORT TRAFFIC

The port of Baton Rouge is now the farthest inland deep-water port on the Mississippi River. In 1942, its traffic was 7,744,000 tons. In 1951—and I do not yet have the corps' figures—the tonnage was 13,159,000; almost doubled.

Most of this tonnage was provided by Baton Rouge's fast-growing oil and chemical industries, moving products across their own private industrial bulk docks. Only one shall, poorly located Baton Rouge municipal dock has been available for deepwater public tonnage, and then only during periods of high water.

The need for major public port facilities is so great at Baton Rouge that we have now taken the necessary steps to provide them—I might add, with the complete, friendly cooperation of the dock board of the great port of New Orleans.

Our decision to locate these public facilities on the west bank just below the town of Port Allen, as indicated in gray, was influenced by several factors. First, the river regimen is favorable, and has remained so for the last 79 years, according to the records. Also, we find that through our plans for a port terminal railroad, we shall be able to serve all the railroads entering the Baton Rouge area, better than at any other location.

Thirdly, there is enough open land available in the port vicinity to serve the resultant industrial expansion. And finally—by no means last as a consideration— the port would be located adjacent to the new cutoff canal entering the river at Port Allen. The location of an inland deepwater port at the northern terminus of the improved alternate route offers industrial and shipping advantages which cannot be duplicated elsewhere in the United States.

The interchange possible between barge, ship, rail, and truck at this point, where industrial property is available, indicates that a development will occur which will roughly parallel that of present Baton Rouge, and which will further increase the Nation's potential. I believe that is better shown on sketch C.

GREATER BATON ROUGE PORT

The Greater Baton Rouge Port is an entirely new and vital factor in this project, for which the basic need was long overdue 10 years ago. The new port also pinpoints the local cooperation factors which are essential to contracts such as this.

For instance, you will find few navigation projects where local interests are proceeding to construct up to $15 million in public ship and barge terminals open to all on equal terms. I have here for your record a print of the preliminary layout of the new port, in relation to the canal. This port will include general cargo docks; barge docks; facilities for handling grain, molasses, cotton, and handling and processing of phosphate rock and perhaps other fertilizer materials needed

by the farmer. One of my colleagues has further information on the status of local cooperation.

In view of all of the previously existing favorable reasons for immediate alternate route revitalization, in recognition of its position as the No. 1 need of the entire Gulf Intracoastal Waterway; and especially in view of the collateral advantages offered by our new Greater Baton Rouge Port, I believe this project merits your consideration for construction funds.

I am informed that the corps could profitably expend at least $3 million in construction during the fiscal year ahead. This amount is the minimum which we urge you to apply to this project at present—to protect the Government's investment in the alternate route, and to allow the economic development we are undertaking to proceed.

DATE OF AUTHORIZATION

Senator KNOWLAND. When was the project authorized?

Mr. WILSON. I believe in 1946, Mr. Chairman, and since that time the Army engineers have received sufficient funds to complete this fieldwork and their field engineering, alinement maps have been prepared and have been presented to the various local agencies involved.

Senator KNOWLAND. The only budget estimate in either the so-called Truman budget or in the revised budget is $50,000 for planning; is that correct?

Mr. WILSON. I believe that is right, sir. I do not know, of course, but I am informed that the Army engineers' recommendation was $3 million. The planning, except for the design of the locks, is complete.

Senator ELLENDER. $1,295,000?

Mr. WILSON. I did not know.

Senator ELLENDER. I brought that out yesterday. Mr. Dale Miller was here yesterday, and I brought out the fact that the engineers have done sufficient planning so that it would entitle them to expend at least $1,295,000 at present.

Senator KNOWLAND. That shows on page 3 of table 1.

Mr. WILSON. We had no knowledge of that of course, Mr. Chairman. In general discussions with the Engineer Corps we deduced that $3 million was requested.

Senator LONG. The fact is that most modern tows simply will not use that bypass, although it saves them 100 miles; is that correct?

Mr. WILSON. They cannot because of the tortuous nature of it within the immediate area of Plaquemine.

Senator LONG. The fact is that the locks are of an integrated type so that they have to break the tow out and lift it in sections. As a result, when you see traffic going through, you see barges waiting in a long line?

Mr. WILSON. That is right.

Senator LONG. They have to take that tow apart before they can get into the lock and then wait around and then when they get into the lock they have to put the tow together on the other side?

Mr. WILSON. That is right. Mr. Sessums will go into that in detail and point out the present flood hazard at high water.

Senator KNOWLAND. Thank you very much, sir.

Mr. WILSON. Our next witness, Mr. Chairman, is Mr. Devall.

THE BATON ROUGE, LA., PORT DEVELOPMENT ASSOCIATION

STATEMENT OF B. C. DEVALL, VICE PRESIDENT AND CHAIRMAN OF THE BOARD OF DIRECTORS

GENERAL STATEMENT

Senator KNOWLAND. You may proceed, Mr. Devall.

Mr. DEVALL. My name is B. C. Devall of West Baton Rouge Parish, La. I am here in my capacity as chairman of the board of directors of the Baton Rouge Port Development Association, which organization has been striving to activate the project under discussion for several years.

My interest in the matter stems from the fact that I also am vice president of the Greater Baton Rouge Port Commission, and president of the West Baton Rouge Police Jury. This police jury is one of the local governing bodies which must furnish the assurances of local cooperation requested by the Federal Government.

Another witness is appearing here to explain the degree of local cooperation which exists for this project. I would like to cite for you a few comparative figures on the use of the alternate route as compared to the main route which show definitely that the alternate route is suffering because of its condition.

MAIN-ROUTE TRAFFIC

The main route between Brownsville and Apalachee Bay, Fla., carried 21,268,000 tons in 1942. In 1951, the last year for which I have full figures, this main route carried 35,528,000 tons, which is a good indication that the Gulf Waterway is assuming a position of ever greater importance as a mover of heavy tonnage.

ALTERNATE-ROUTE TRAFFIC

Now, in 1952 the alternate route between Morgan City and Plaquemine carried 3,477,000 tons, and in 1950 the tonnage had fallen off to slightly under 2 million tons.

Senator HOLLAND. You mean in 1942 instead of 1952 there, do you not?

Senator LONG. You mean 1942 in the first instance there. According to that statement, if that is 1952, then the alternate route has almost doubled in the last 2 years.

Mr. DEVALL. Yes.

Senator LONG. What you mean there is that the amount of traffic has been reduced almost one-half because of the condition of the waterway?

Mr. DEVALL. That is right.

Senator LONG. While the amount of traffic being hauled over the main route has almost doubled?

Mr. DEVALL. That is right.

Thus, while we see an increasing use of one of our most valuable inland waterways generally, we find that the one section which is inefficient has dropped off in tonnage. The answer simply is that the alternate route is in no condition to handle the traffic that would be offered under suitable operating conditions.

I have stood at the locks at Plaquemine and watched tows attempting to enter the river. It is necessary to break up a tow completely, move one barge at a time into the river, where it must be tied up while the next barge is brought out. A tow must be broken up completely and then reassembled in order to make use of this route. If several tows happen to arrive at the locks at the same time, the delay and confusion are so great as to make the use of that route a totally impractical matter.

IMPORTANCE OF CUTOFF CANAL

I would like to corroborate the testimony of my colleagues in regard to the importance of this cutoff canal to our planned Greater Baton Rouge port. The savings in time and money to barge operators through the shortening of the route from west to north and north to west, as compared with the longer way around when you enter the Mississippi at New Orleans, is also a vital point. But, most of all, I would like to emphasize the extremely important fact that the Federal Government is allowing an important part of our water-transportation system to deteriorate to the point where its investment over many years will be imperiled unless the improvement is made.

I thank you for this opportunity to appear, and I will be glad to try to answer any questions you gentlemen might have.

Senator KNOWLAND. Thank you, Mr. Devall.

Mr. DEVALL. Thank you very much, gentlemen.

Mr. WILSON. Mr. Chairman, next we have Mr. Wilkinson.

BATON ROUGE PORT ASSOCIATION

STATEMENT OF P. CHAUVIN WILKINSON, PRESIDENT,

IMPROVEMENT OF ALTERNATE ROUTE URGED

Senator KNOWLAND. Mr. Wilkinson, you may proceed.

Mr. WILKINSON. Mr. Chairman and members of the committee, my name is P. Chauvin Wilkinson, of Port Allen, La. I am here in my capacity as president of the Greater Baton Rouge Port Association, which strongly urges immediate improvement of the alternate route. Our association is composed of members of all business organizations and governmental units within the port area. I have studied this project, also, as a member of the Police Jury of West Baton Rouge Parish, one of the parishes which will furnish right-of-way for the canal. In private business, I am an owner and operator of the Poplar Grove Planting & Refining Co.

Our port association, not to be confused with the official State agency, the port commission, is active in the role of helpful civic organization. We have given strong assistance to the police juries and port commission in determining the extent of local cooperation, as to the assurances which must be furnished to the Federal Government by local interests.

I can state that our efforts have advanced to the stage where I am confident that the local assurances needed will be furnished if the Federal Government will only act to start work on this vital project.

CONFERENCES WITH PROPERTY OWNERS

I have participated in conferences with the 4 property owners who control approximately 75 percent of this right-of-way. Also present were the presidents of the two police juries involved in securing such right-of-way: Mr. B. C. Devall, of West Baton Rouge Parish, and Mr. H. M. Kimball, of Iberville Parish.

We have obtained letters from these 4 property owners, which I would like to submit to you gentlemen now, stating that it is their intention to grant the right-of-way needed for the cutoff-canal section of the alternate-route project between Indian Village and Port Allen. This is the new portion of the project, the plan being to use the present channel south of Indian Village. Thus, 75 percent of the 20 miles required for the land cut is already accounted for. We anticipate no difficulty in dealing with the other property owners, all of whom have compartively small acreage.

In regard to these letters, I shall point out on the map the approximate area covered by each. The letter from the Southern Land Products Co. covers most of the route marked in green lying within West Baton Rouge Parish. The letter from Mr. Calvin Schwing covers these portions is Iberville Parish. The letter from Mr. Louis Wilbert covers this portion is Iberville Parish, and the letter from Baist Cooperage & Lumber Co. covers a smaller portion of the route lying partly in Iberville and partly in West Baton Rouge.

Senator KNOWLAND. What is the situation on the red area?

Mr. WILKINSON. These people have not been contacted as of yet, sir. Most of this land from this point [indicating] to this point here [indicating] is swamp area. This land from this point [indicating] forward, most of it is at the present time being used as pastureland. We do not feel that the Police Jury of West Baton Rouge Parish will be available free. We have high hopes that we will be able to get these areas over here free and turn over that to our police juries.

Senator ELLENDER. Mr. Wilkinson, should this committee appropriate the amount suggested by the Corps of Engineers, it is your feeling that you will not have any trouble in getting the remainder of the rights-of-way?

Mr. WILKINSON. We will not have any trouble at all, sir.

Senator ELLENDER. That is one of the requirements.

Mr. WILKINSON. We realize that, sir, and those that we cannot get on grants we realize it is our obligation to buy them and turn them over to the Federal Government, which we feel that we can do, sir.

IMPORTANCE OF PROJECT

I would like to add that, through the 4-parish membership in our port association and the 3-parish membership in the port commission, a high degree of understanding exists as to the importance of this project. We have all seen traffic lag on the alternate route due to its inadequacy, while over the whole route of the Gulf Intracoastal Waterway it has soared from 21 million tons in 1942 to 35 million tons in 1951. We especially realize the importance of the new cutoff in relation to our planned port development.

DRAINAGE BENEFITS

As an additional consideration, the drainage benefits of this project are important to my parish. The parish and State have cooperated in completing a $1,600,000 parishwide drainage system, of which the major outfall was to be the cutoff canal. We now have 31,000 acres in cotton, corn, sugarcane, and improved pasture in West Baton Rouge Parish. The use of the cutoff canal as a needed outfall for our drainage canals will place additional thousands of acres into useful production. It would also increase the efficiency of lands now in cultivation.

In closing, let me assure you that nowhere will you find a higher degree of enthusiasm and local cooperation for a Federal project. If you give us the needed help, you will see us adding many millions of dollars in production annually to the national economy.

Senator KNOWLAND. Thank you very much, Mr. Wilkinson. The letters attached to your statement will be made a part of the record.

Mr. WILKINSON. Thank you very much, sir.

(The letters referred to follow:)

SOUTHERN LAND PRODUCTS CO.,
Detroit 26, Mich.

Mr. B. C. DEVALL,
Police Jury, Parish of West Baton Rouge,
Port Allen, La.

DEAR MR. DEVALL: At a meeting of the board of directors of Southern Land Products Co. held this date, the matter of granting a right-of-way for the purposes of the intercoastal waterway extension was discussed. I wish to assure you that it is the wish of the directors to cooperate in every way with the parish in promoting this development. It follows that the directors desire to grant the right-of-way and expect to do so. It would appear, however, that a number of questions must be cleared up and possibly, certain conditions must be incorporated in any actual grant, for the purpose of safeguarding the interests of the company in its lands. It seemed to the directors that there might well be a number of questions which would require discussion before the form of a right-of-way grant could be agreed to, which discussion will probably require a visit to Port Allen by the president of the company or the undersigned.

In any case, however, the directors wish me to assure you that it is their belief that the entire matter can be satisfactorily worked out.

Very truly yours,

SOUTHERN LAND PRODUCTS CO.,
H. L. CANERLY, *Secretary.*

PLAQUEMINE, LA., *May 7, 1953.*

Mr. H. M. KIMBALL,
President, Iberville Parish Police Jury,
Plaquemine, La.

DEAR SIR: With reference to the matter of right-of-way for the proposed extension of the intercoastal waterway from Indian Village, a point about 6 miles west of the town of Plaquemine, La., to Port Allen, La., discussed at the meeting we attended yesterday, at which the Wilbert interest and the Schwing Lumber & Shingle Co. were represented.

We are agreeable to going along with the landowners in granting this right-of-way through our lands as shown on the map, under the same terms and conditions as will be acceptable to the aforesaid property holders represented at the meeting.

Yours very truly,

BAIST COOPERAGE & LUMBER CO., INC.,
JACOB BAIST, *President.*

PLAQUEMINE, LA., *May 8, 1953.*

Mr. H. M. KIMBALL,
President, Iberville Parish Police Jury,
Plaquemine, La.

DEAR MR. KIMBALL: This will confirm my verbal statement made to you at a meeting held at the courthouse here in Plaquemine on Wednesday, May 6, which meeting was participated in by individuals interested in the extension of the intercoastal waterway by means of a canal from the vicinity of Plaquemine to Port Allen contemplated in connection with the port development project in West Baton Rouge Parish, to the effect that this company will cooperate in every way possible in order to promote this development, and that it will be the desire of this company to grant necessary rights-of-way through and across any property owned by this company which may be traversed by said canal.

You will understand, of course, and as I stated to you, that there must of necessity be certain conditions incorporated in any actual right-of-way grant for the purpose of safeguarding the interests of this company in its lands, and there may be a number of questions which would require discussion before a right-of-way deed could be agreed to.

Yours very truly,

A. WILBERT'S SONS LUMBER & SHINGLE CO.,
LOUIS J. WILBERT, *President.*

MAY 7, 1953.

Mr. H. M. KIMBALL,
President, Police Jury, Iberville Parish,
Plaquemine, La.

DEAR MR. KIMBALL: We were very glad to talk with you and others about the matter of granting a right-of-way for the intercoastal canal to Port Allen.

We will cooperate in every way and will be willing to grant a right-of-way provided that the matters we discussed will be taken care of. We don't want to lose any of our minerals and have anything else come up that would cost us money. In the discussion you stated that everything could be taken care of satisfactorily, and if this is done there is no reason why we should not give a right-of-way.

I will be glad to recommend the same to other individuals who have an interest in some of the lands that you wish, and I feel sure that they will go along with you.

Yours very truly,

SCHWING LUMBER & SHINGLE CO., INC.,
CALVIN K. SCHWING, *President.*

Mr. WILSON. Next we have Mr. Sessums.

DEPARTMENT OF PUBLIC WORKS, STATE OF LOUISIANA

STATEMENT OF ROY T. SESSUMS, DIRECTOR

GENERAL STATEMENT

Senator KNOWLAND. Proceed, Mr. Sessums.

Mr. SESSUMS. I am Roy T. Sessums, director of public works for the State of Louisiana. I am an engineer, and our department is responsible in Louisiana for flood control, inland waterways, and various other developments.

With regard to this intracoastal waterway, actually this is an extension of the intracoastal waterway from Port Allen down to Indian Village. As stated prior, it was authorized on the 24th of July 1946 by the 79th Congress. To date no funds for actual construction have been actually appropriated, only planning money for the alinement of the canal. So this is not in my opinion a new project, but actually one to replace, shall we say, an obsolete waterway and facility that now exists from Plaquemine into Indian Village.

With regard to the Plaquemine locks which now have to be used, if if any transportation uses this particular portion of the canal which we hope can be bypassed, those locks are 260 by 56 feet. It has a 10-foot sill with 28-foot lift. As we all know, the modern tows cannot go through that, as has been explained previously, because they have to be broken up. With a modern barge the towboat has to be disconnected, so you have two lockages to get them through. The locks are located in a bend of the river and there is some hazard when those tows tie and plan to go through the lock.

INITIAL PLANS FOR LOCK

I might say that the plans for this particular lock in Plaquemine were drawn up in 1897. Due to certain construction difficulties, the locks were not put into operation until 1909. They are placed on timber piling. The concrete in those locks is not in very good shape. In fact, those locks constitute a serious threat to our flood-control program.

Since those locks were designed and constructed, the stage of the river there has risen from 36.5 feet, Gulf mean level, to 43 feet, some 7 feet of additional water being present there as to what it was. That means when you have extreme high water on the river those locks cannot be operated, they have to be closed to prevent flooding. That results in absolutely no use of the locks.

CLOSING OF LOCKS

In 1945 this lock was closed from March 30 to May 19 and for varying periods in 1912, 1922, 1927, 1937, and 1950. So far this year they have not had to be closed because as yet we have not had extremely high water on the Mississippi.

The present channel is of 9-foot depth and 100-foot width on the bottom. That should be increased in any new channel to at least 12-foot depth by 125-foot width in order to accommodate present tows and certainly 12-foot sill for any new lock. New locks are up to 1,200 feet in length. You might recall the Chain of Rocks lock above St. Louis. Similar locks would be necessary here.

This particular route cuts off some 160 miles for traffic originating upriver and going to Morgan City and points west. When I say points west the intracoastal canal system goes to Brownsville, Tex. You have huge areas down there that would benefit by this, which is a resulting saving to shippers and manufacturers up in the iron and steel region. This is not a local project, shall we say, in effect the savings are given to the people throughout the country. It is a local project with regard to the actual construction of it.

BENEFITS OF PROJECT

Senator LONG. That project would then benefit all of the Texas ports as well as the ports of southwest Louisiana?

Mr. SESSUMS. That is correct.

Senator LONG. It would also bring petroleum products 160 miles nearer to the heart of America with those refineries in the middle part of the North?

Mr. SESSUMS. That is correct, as well as all your steel shipping from the steel industries down the Ohio and Monongahela into the Mississippi and to the Southwest.

It is estimated it will save about 2 days in shipping time rather than coming to New Orleans and across making this shortcut down to Morgan City and westward, plus approximately 32 cents per ton, which is a considerable savings; that is with regard to shipping.

OTHER FEATURES

Now there are other added features to this construction. Mr. Wilkinson mentions drainage. At the present time there are some 55,000 acres that are being drained in there, and there are approximately that many more. The State and parishes have spent close to $2 million for drainage canals, some 578 miles of them. Certainly it will improve that, and we will put many, many thousands of acres of land into better production.

In addition to that the State of Louisiana has authorized the Greater Baton Rouge Port Authority to construct a deep-water port facility along the Mississippi and have authorized the floating of a $15 million bond issue. This certainly would benefit by virtue of this new port facility. So I would say there is wholehearted and even more of local cooperation in the establishment of port facilities there which we believe is of great importance to the Nation as a whole.

I might add further there that we all know the loss of shipping and transportation during the last war. All along the east coast and Gulf coast we were trying to get oil out, including supplies. This will improve an inland waterway that will be immune from submarines. As mentioned earlier, I was with the United States Strategic Bombing Survey in Europe and other places, and I have seen first hand what happens to transportation when a serious attempt is made to disrupt it. I would say that this inland waterway, the improvement of it, would certainly be a very great asset to our shipping in the United States because we obtain from that region much of the oil resources from Texas, from Louisiana, from Arkansas, and other places that must be had in times of stress.

Senator LONG. As a matter of fact, there was not much improvement of the inland waterway made during the last war to get the oil from the Gulf?

Mr. SESSUMS. That is correct. What happened during the last war was that they pulled barges that were only partially efficient from many of the shallow waterways and used them there for the transport of various commodities. Certainly we need to provide adequate transportation facilities.

Senator LONG. Some of the great losses were down at the mouth of the Mississippi River as a result of submarines?

Mr. SESSUMS. Yes, sir.

Senator ELLENDER. Mr. Sessums, you have given us the distance that is to be saved. Will you indicate the distance from Morgan City to Port Allen?

Mr. SESSUMS. Morgan City to Port Allen is 64.9 miles.

Senator ELLENDER. To reach that same point, what do you have to go by way of New Orleans?

Mr. SESSUMS. 233.8 miles, and you are bucking a strong current here in the river for some 150 miles.

Senator LONG. The actual fact is that most of the shipping does that, and only about a quarter of the traffic that should be going up there does?

Mr. SESSUMS. We will see barge traffic increased tremendously with that improvement. There are many millions of tons that will go through there yearly.

It has been a pleasure to speak to you gentlemen this morning, thank you.

Mr. WILSON. Mr. Chairman, we would like to offer the three sketches here.

Senator KNOWLAND. The sketches may be left with the committee for examination at the markup.

Mr. WILSON. For the committee's information.

Senator KNOWLAND. Yes.

Mr. SESSUMS. Will my statement be included in the record, sir?

Senator KNOWLAND. It will.

(The statement referred to follows:)

STATEMENT OF ROY T. SESSUMS, DIRECTOR, DEPARTMENT OF PUBLIC WORKS, STATE OF LOUISIANA

Mr. Chairman and members of the subcommittee, this brief has been prepared by the Louisiana Department of Public Works to present to the Subcommittee on Deficiency Appropriations, Committee on Appropriations, of the United States House of Representatives, justification for adequate appropriations by Congress of funds to begin construction on the Louisiana-Texas Intracoastal Waterway Plaquemine-Morgan City Alternate Route by the Corps of Engineers, United States Army, in the fiscal year 1954.

The Louisiana Department of Public Works is the liaison agency between the State of Louisiana, the Corps of Engineers, United States Army, and the Federal Government, and as such is responsible for all flood control, drainage, navigation, and irrigation projects constructed with State funds, and, as the planning agency of the State government, formulates plans for the proper development of the State.

The extension of the Intracoastal Waterway from Indian Village, La., to Port Allen and Baton Rouge, La., and the enlargement of the existing navigation channel from Morgan City to Indian Village was authorized on July 24, 1946, by the 79th Congress. Since that time no funds have been appropriated for the construction of this project.

The extension of the Intracoastal Waterway from Indian Village, La., to Port Allen and Baton Rouge, La., is not a new project, but is needed to replace and augment the facilities provided by the Indian Village to Plaquemine Waterway. This portion has become obsolete for use by modern waterway transportation and is slow and expensive for any type of transportation.

The Plaquemine lock is the bottleneck in the Indian Village to Plaquemine Waterway which in itself is far from adequate.

The concrete lock chamber is 260 by 56 feet and rests on a timber pile foundation. The lift is 28 feet and the depth over the sill at low water is 10 feet. This lock was operated by steam until March 1950, and since that time has been operated by electricity.

The limitations of the Plaquemine lock are its short and narrow chamber and its short forebay. The dimensions of modern barges are 195 feet by 35 feet. An average tow is made up of four such barges. Since the dimensions of this lock are only 260 by 56 feet, 2 lockages will be required for each barge. This is a most time-consuming operation. The Plaquemine lock is located in the bend of the river, and all river traffic passes very close to the entrance to the lock. By reason of this and the lock's short forebay, it is both difficult and hazardous to bring tows in and out of the lock from the river. Tugboat captains report that a large eddy just upstream from the lock adds to their difficulties.

Navigation channels for use by modern inland waterway traffic should have at least a 125-foot bottom with a depth of 12 feet, and preferably a 200-foot bottom

with a 15-foot depth; consequently, the 10-foot depth of water over the sill at the Plaquemine lock, as well as its small size and age, absolutely preclude any improvement to this waterway.

Plans and specifications for this lock were approved December 2, 1897, and a contract for its construction let May 28, 1898. Due to various difficulties encountered during its construction, it was not placed in operation until March 12, 1909.

The lock was designed in 1896 when the maximum stage of the river was 36.05 M. G. L. and not the present maximum stage of 43.0 M. G. L. This is evidenced by the fact that this lock cannot be operated during high water. Flash boards must be placed on top of the gates to hold out the river and water retained in the lock chamber, to reduce the pressure against the river gates. This lock is closed when the level of the river reaches 38.0 M. G. L. In 1945 this lock was closed from March 30 to May 19, and for varying periods in 1912, 1922, 1927, 1937, and 1950.

Navigation in the waterway from Plaquemine to Indian Village is hampered by two severe bends in the short distance between the lock and the highway and railroad bridge, as well as the proximity of the bridge. The remainder of the canal also has numerous sharp curves.

The tows composed of the older and smaller barges suffer the same delays and inconveniences to a lesser degree.

The Louisiana-Texas Intracoastal Waterway-Plaquemine-Morgan City route provides for increasing the present 9- by 100-foot channel from Morgan City to Indian Village, the excavation of a 12- by 125-foot channel from Indian Village to Port Allen, the construction of a 500- by 56-foot lock with a depth of 12 feet over the sill at low water and the continued maintenance of the Indian Village to Plaquemine navigation channel and the Plaquemine lock.

The new project will allow rapid, efficient, and easy operation of modern inland waterway equipment. The new lock with adequate forebays will provide for lockages into and out of the river with a minimum of delay.

The operation of the new lock will not be interrupted by floods. During floods no special precautions need be taken to insure the safety of the lock or the integrity of the levee line.

The distance from Morgan City via New Orleans to Baton Rouge is 225 miles; the distance from Morgan City via Plaquemine to Baton Rouge is 75 miles; and the distance from Morgan City via Port Allen to Baton Rouge is 65 miles.

Traffic whose origin and destination is west of Morgan City and north of Baton Rouge, which is now routed through New Orleans because of the limited dimensions of the Plaquemine-Indian Village Waterway, will save from 1 to 2 days in time and about $0.32 per ton of cargo. Traffic over the proposed Indian Village to Port Allen route will save both time and money because of the increased speeds made possible by the new project.

The navigation canal from Indian Village will provide an adequate major drainage outlet for 55,000 acres of fertile land. The average annual benefit of this feature alone would be in excess of $550,000. Local interests have already expended $1,360,000 for the drainage of this area by 587 miles of canals which are dependent upon this navigation canal for an outlet.

It is anticipated that previous estimates of the tonnage which would use this project will be greatly increased due to the facilities to be provided by the Greater Baton Rouge Port Commission, the rapid industrial growth of Baton Rouge, tonnage developed by the Trinity River project and the industrial site and dock facilities of the Devils Swamp project.

The strategic bombing survey in Germany, France, and Belgium and the low countries after the last war showed how completely transportation can be paralyzed by air attack. The war also showed us the tremendous need for increased waterway transportation facilities in this country. To acquire reliability, flexibility and the required capacity of our vitally needed waterway transportation system, this project as authorized by Congress for the enlargement of the Intracoastal Canal from Morgan City, La., to Indian Village, La., extension of the waterway from Indian Village to Baton Rouge and the installation of a lock at Port Allen, La., should be constructed without delay.

Senator KNOWLAND. Senator Martin, we would be glad to hear your statement at this time.

SCHUYLKILL RIVER PROJECT

STATEMENT OF HON. EDWARD MARTIN, A UNITED STATES SENATOR FROM THE STATE OF PENNSYLVANIA

FUNDS FOR CONTINUATION OF DREDGING

Senator MARTIN. Mr. Chairman, I appreciate this opportunity to appear before you, in connection with funds to continue the Schuylkill River project.

You have already heard a description of the progress on this project from the Corps of Engineers—and so I will not go into great detail.

My principal purpose is to urge that there be no reduction in the requested funds for continuation of the Schuylkill dredging—which has reached a strategic point—and can go ahead to completion much faster than demonstrated in the past year.

In fact, it is my feeling that the earlier budget request reflects the needs of this project more objectively than does the present requested $500,000—because we have reached a point where the final work can be accelerated. The present unobligated balance of funds now on hand, plus the requested $500,000, is in my opinion a very modest estimate of what will be needed for fiscal 1954 work.

ESTIMATED DREDGING COST

It will be noted, Mr. Chairman, that the estimated cost of dredging the Fairmont Pool has increased from $8,350,000 to $10,694,300.

Fortunately, this is just about balanced by decreases in the cost of dredging the Flat Rock and Plymouth Pools, which work is practically completed.

The overall estimated Federal cost of the project has remained the same, which the committee must admit is unusual in this day of increased costs on practically every undertaking.

In stressing the need for full speed ahead to complete the final and most important step in the Schuylkill project, I want to recall to the committee's attention that the Commonwealth of Pennsylvania has completed its part of the bargain, both as to appropriation of funds, and work to be accomplished.

The committee knows that the Schuylkill project is a joint venture approved by Congress, which provided that the Federal Government would take care of the river from Plymouth Pool to the Delaware River, while the Commonwealth of Pennsylvania would take care of the portion of the river above.

STATE SHARE APPROPRIATED

The Commonwealth of Pennsylvania has appropriated $35 million for its share of the work, and with these funds has completed its portion of the work.

This work involved the construction of works to intercept and retain accumulated mine wastes; the removal of all culm deposits between Auburn and the Norristown Dam; the furnishing of all land necessary for disposal areas for culm deposits to be removed from the Federal project between Norristown and Fairmont Dam.

The Commonwealth has also stopped the discharge of mine wastes into the river and its tributaries and has made substantial progress toward stopping the discharge of industrial wastes into the streams of the Schuylkill.

In addition the Commonwealth has furnished assurances that it will hold and save the United States free from damages due to the construction works and maintain and operate the works after completion in accordance with regulations prescribed by the Secretary of the Army.

FEDERAL GOVERNMENT SHARE

Mr. Chairman, the Commonwealth of Pennsylvania has appropriated its agreed share, $35 million, and has done its work. The Federal Government has appropriated $3,294,000 of the estimated Federal share of $12,574,000, and the largest phase of the Federal operation is still to be undertaken.

Mr. Chairman, I do not mean to imply that I think the Corps of Engineers has been dragging its feet on the Schuylkill project, but it will be dragging its feet from now on, unless sufficient funds are available for the progress that can be and should be accomplished in this forthcoming fiscal year.

I realize, Mr. Chairman, that the latest available figures show there was an unobligated balance of funds on the project amounting to $1,492,287, as of March 31, 1953. This balance undoubtedly encouraged the Bureau of the Budget to recommend only the $500,000 being requested.

We must bear in mind that the unobligated balance does not represent savings, nor reduced costs, but only that contracts for the dredging and other operations in connection of the Fairmont Pool could not be let until certain rights-of-way were obtained. They can now go ahead full speed.

IMPORTANCE OF PROJECT

I do not need to tell the committee that the Schuylkill River project is of equal importance to both the Federal Government and the Commonwealth of Pennsylvania. Numerous industries and the naval base located along the lower reaches of the Schuylkill are seriously affected by culm deposits from above the Fairmont Dam. Plants using water from the Schuylkill for domestic and industrial purposes are also seriously affected. A number of the industries including oil refineries, ore and grain loading piers, as well as the naval base, are highly important to the defense effort.

Therefore, Mr. Chairman, Federal funds should be forthcoming sufficient to effectuate the benefits from the work fully completed by the Commonwealth, and to provide for adequate progress on the commitment by the Federal Government.

Senator KNOWLAND. Thank you, Senator Martin.

UNEXPENDED BALANCE

Senator ELLENDER. Senator Martin has just stated that the unexpended balance is over $1 million. How did that come about when last year we only appropriated $994,600?

General CHORPENING. It is on account, as the Senator stated, of acquiring certain rights-of-way and arrangements that had to be completed.

Senator ELLENDER. Then none of the money we appropriated in 1953 was expended?

General CHORPENING. Some of it will be; yes, sir.

Senator ELLENDER. You had a large portion that was not spent from the 1952 appropriations to make up the $1,200,000, whatever you had?

General CHORPENING. There is going to be quite a considerable amount of unexpended funds. I do not recall the amount of unobligated as of June 30, but it has been due to certain right-of-way arrangements that had to be worked out with the city, and that has been straightened out now. I believe we testified on that in connection with that project here earlier in the hearings.

Senator ELLENDER. If this committee should decide to give the $500,000, is it your considered judgment that this $500,000, plus your unobligated and unexpended funds, will be spent during the next fiscal year?

General CHORPENING. Essentially so; yes, sir.

Senator ELLENDER. All right.

Senator MARTIN. I want you to know how much I appreciate this.

If there are any questions, Mr. Chairman, along the line that Senator Ellender has mentioned, if you will let me know I will have them worked out. I do not try to carry those things in my head. It may be interesting to you to know that this project was started while I was Governor of Pennsylvania.

IMPORTANCE TO NATIONAL DEFENSE

From a national-defense standpoint it is most important because it affects those great industrial areas in addition to our naval station there, which is really the oldest continuous one in the United States Navy Department.

Senator ELLENDER. Have you started handling the culm and waste problem?

Senator MARTIN. That has been taken care of. We have arranged that all of the deposits from the mines in the upper reaches of the Schuylkill River have all been taken care of. I think that was completed during the administration of Senator Duff, who succeeded me as Governor. If not, it has been completed under the present administration. That is where we spent the greater part of this $35 million.

Mr. Chairman, if there is any detail that the committee may want, do not hesitate to let me know, and with the engineers we will work them out.

Senator KNOWLAND. Senator, again I want to say that we are glad to have you before the committee. I suppose there is no legislative committee that works in closer cooperation and coordination with this committee than the Public Works Committee of which the Senator is chairman. I know you have a busy schedule of your own.

Senator MARTIN. Thank you very much, gentlemen.

Senator KNOWLAND. The committee has received a letter from the Honorable Warren G. Magnuson, a United States Senator from the State of Washington, concerning planning funds for the Libby Dam. That letter will be placed in the record at this point.

(The letter referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
May 11, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Civil Functions Appropriations,
United States Senate

DEAR SENATOR: Libby Dam on the Kootenai River in the Northwest is one of the most important projects, both for control of the Columbia in terms of storage, and for power production. Some controversy has arisen concerning the best location for this dam.

I understand the Great Northern Railroad, J. Neils Lumber Co., of Libby, and a mining concern in that vicinity have argued that a dam constructed some miles upstream would be less costly, in that it would necessitate less cost to the Government for relocation of right-of-way and acquisition of lands.

It is possible that there may be some merit to these allegations but, without a survey of the situation, it is impossible to come to a factual conclusion. I strongly believe the Corps of Engineers should be permitted to use funds that have already been allocated for surveys at Libby to reexamine the entire situation.

The obstacle in the way of such action is a paragraph that was inserted in the Senate report on H. R. 7268, the civil functions appropriations bill for fiscal year 1953. On page 8 of that report, there appears the following language:

"The committee has recommended $200,000 for the continuation of planning on Libby Dam in Montana with the understanding that the funds will not be expended until the status of the necessary agreement for the storage of water on the Canadian side is considered satisfactory by the United States section of the International Joint Commission."

You will note the reference to a "satisfactory" agreement between the Canadian and United States sections of the International Joint Commission. Recently the Libby project was withdrawn for an indefinite period from further consideration by the Joint Commission. The $200,000 referred to in the committee report, therefore, will be frozen for an indefinite period unless your committee this year takes action to release these funds.

In my judgment, the importance of Libby Dam—or an alternate site—to the development of the Columbia and its tributaries is so important that the corps should be permitted to proceed at once with its studies. Obviously, if Libby is to be put on ice, so to speak, the sensible thing is to take a new look at that stretch of the Kootenai River to ascertain whether some of the objections can be met or ameliorated.

I am hopeful you and your associates will agree with my contention and will include language in your report on civil functions appropriation for 1954, releasing the $200,000 for use by the engineers in the vicinity of the proposed Libby Dam.

Thanks for your consideration and kindest personal regards.

Sincerely,

WARREN G. MAGNUSON,
United States Senator.

Senator KNOWLAND. The committee has also received a request from Mr. John H. Bishop, secretary of the Zonolite Co., that his statement be made a part of the record. His statement will be inserted in the record at this point.

(The statement referred to follows:)

STATEMENT OF JOHN H. BISHOP IN RE LIBBY DAM, KOOTENAI RIVER, MONT.

My name is John H. Bishop. I am secretary of Zonolite Co. I am appearing here in connection with the proposed appropriation of funds for planning or construction of a dam in the Kootenai River near Libby, Mont.

If the dam is constructed at the location presently proposed, Zonolite's access road, loading facilities and conveyor across the Kootenai River will be inundated.

1. Purpose of dam

The Libby Dam is called a multiple-purpose dam. It is designed to furnish power, provide navigation, and for flood control. It is principally a power project that will develop some 292,000 kilowatts at the site and 612,000 kilowatts at downstream plants.

2. Status of appropriations

$333,000 has previously been appropriated and spent in the study of this project. $200,000 was appropriated by the last session of Congress but cannot be spent until the American Section of the International Joint Commission has assured the Corps of Engineers that the status of the agreement for storage of water on the Canadian side of the boundary was progressing satisfactorily. The American Section has not given that assurance.[1] $200,000 is requested in the present budget.[2]

3. Proceedings before the International Joint Commission

Since the reservoir of the proposed dam will extend 42 miles into Canada and will flood some 13,000 acres, it is necessary to have the project approved by the International Joint Commission. An application for approval was submitted by the Department of State on January 12, 1951.[3] On April 8, 1953, this application was withdrawn by the Secretary of State at the request of the Secretary of the Army to permit further investigation of domestic questions, such as selection of the axis, relocations, and related matters.[4] Until the problems that dictated the withdrawal of the application have been settled, there should be no appropriation for this project.

4. Rescission of authorization

On April 22, 1953, Senator Martin introduced a bill (S. 1719) to rescind the authorization for this project. I have been informed that a companion bill will be shortly introduced in the House. It is respectfully submitted that this committee should not recommend appropriation of funds for a project while legislation is pending in Congress for its deauthorization.

5. Proposal to sell power to Canada

The chairman of the Canadian Section of the International Joint Commission stated to the Canadian Parliament on March 19, 1953, that Canada would not accept money damages for the flooding of the affected area in Canada, but must be compensated by part of the power to be developed at the Libby Dam. Canada does not propose to pay any part of the cost of construction, maintenance, or operation of the dam. If any sizable amount of power from this project is to be allocated to Canada, then obviously the benefits to be received in this country from the construction of the project will be less than they would be if a comparable project were constructed where no allocation of power to a foreign country was necessary. It is believed that this important element should be considered in determining whether money should be appropriated for the project, and that no appropriation should be made until such time as this question has been settled.

6. Costs other than construction costs

Construction of the proposed dam at the site presently recommended by the Seattle District Office of the Corps of Engineers will require relocation of approximately 100 miles of the Great Northern Railroad at an estimated cost of $100 million. In addition, severance damages to the railroad have been estimated at $75 million. Direct damages to Zonolite Co. and to other industries affected, are estimated to be in excess of $5 million. And severance damages to Zonolite Co. are estimated at more than $50 million. The total of the above is in excess of $225 million.

The most recent estimate of costs by the Corps of Engineers for the project was $318,508,000. We have been advised that the above estimate includes $100 million for railroad relocation and damages to persons affected, leaving construction costs at $218,508,000.

It will thus be seen that the costs for relocation, damages, etc., exceed actual construction costs. Again it is believed that this is a factor that should be considered by this committee in appropriating funds for the project. Where costs of relocation and damages exceed actual construction costs there certainly is grave doubt as to the economic soundness of the project. I understand that there are many other locations in Montana where dams could be located where the money to be spent would go into actual construction rather than railroad relocation, severance damages, and other like expenditures.

In conclusion, I would like to leave one final thought with this committee. It has been the practice in past years to authorize projects such as this without fixing

[1] Hearings on applications for civil functions for 1953 at pp. 27–28.
[2] Budget, p. 656. Request is included in figure of $3,500,000 for planning.
[3] International Joint Commission, Doc. No. 64.
[4] Letter dated January 8, 1953, Congressional Record April 20, Appendix, p. A2121.

a specific location for the project; without a definite plan for construction of the project; and without a fixed estimate of the cost of the project. Blanket authorizations such as this are not believed sound. In the method that has been followed, tremendous sums have been expended on projects that initially were expected to cost only a fraction of the final cost. It is the announced policy of this administration to reduce Government expenditures, balance the budget, and reduce taxes. In line with that policy, it is respectfully suggested that a project such as this should be considered in its entirety. By that I mean that specific plans should be prepared for the project at a definite location and at an ascertained cost. Provision should be made in such plans for the people who will be adversely affected by it. Legislation should then be requested authorizing the project to be built in accordance with the plans, at the site fixed, and within the estimated cost. The legislation should provide a method of settlement of the problems of the persons affected by the project. Appropriations should not be made until specific plans as above outlined have been completed. That has not been done n the present case. No further funds should therefore be appropriated.

Senator KNOWLAND. Senator Mansfield, we will be glad to hear from you.

BULL HOOK FLOOD CONTROL—LIBBY DAM

STATEMENT OF HON. MIKE MANSFIELD, A UNITED STATES SENATOR FROM THE STATE OF MONTANA

AMOUNTS REQUESTED

Senator MANSFIELD. Mr. Chairman and gentlemen of the committee, I appear on behalf of the appropriation for 2 projects, one is the sum of $790,000 for the Bull Hook flood-control project in Montana, work on which has been started by the Army engineers, and the first appropriation was made during this past fiscal year.

Last year the city of Havre suffered something like $2 million worth of damage because of the flood on Bull Hook Creek which goes through the center of the city. This has been a recurring proposition in that part of the country, and this is necessary to take care of the danger which occurs almost yearly in Havre, and I respectfully request the committee to allow the $790,000 requested this year for that project.

The second project is Libby Dam in Lincoln County in northwestern Montana for which $150,000 is asked for planning this year. I understand that an official of the Zonolite Co. was before this committee last week in opposition to this dam, at least in opposition to the site proposed by the Army engineers. I do not know that the site makes too much difference, and if I recall the position of the Zonolite Co., they want the location changed to another point on the Kootenai River.

That is all right. However, this official made this statement, that the Canadian Government was interested in getting a part of the power to be projected from Libby, and I wish to respectfully state to the committee that the Canadian Government has never made any request for the use of any power from this proposed project.

Furthermore, if the Canadian Government made such a request, the entire Montana delegation would be opposed to it because we believe that power developed in the United States should be used in our own country. This dam eventually will cost $220 million if the authorization is not withdrawn.

BILL TO DEAUTHORIZE LIBBY DAM

In that respect I would like to call the committee's attention to the fact that a bill has been introduced by Senator Martin of Pennsylvania to deauthorize the Libby Dam. Libby Dam is vitally needed, it is fully reimbursable, and it will give a great deal of flood protection, not particularly in my State but throughout the north Idaho panhandle where the Kootenai River overflows its banks practically every year. It will not give much in the way of irrigation or reclamation, but it will give a great deal of power, something like 6000,000 kilowatts of power in my own State plus an additional 1 million kilowatts of firmedup power for the Columbia Basin.

This is a very vital project. In the 10 counties in Montana we have 10 percent of the potential hydroelectric power in the United States, roughly 10 million kilowatts of power. Very little in the way of taxable property will be affected by this project, as a matter of fact, just as in the case of the Hungry Horse the tax base will be broadened, industries will come in, and more in the way of security will be given to our people.

So I respectfully request this committee to allow the $150,000 request this year for planning on the Libby project.

Thank you, gentlemen.

Senator KNOWLAND. Thank you very much, Senator.

Senator KNOWLAND. Colonel Lipscomb?

DALLES DAM, OREG.

PORTLAND DISTRICT, CORPS OF ENGINEERS

STATEMENT OF COL. THOMAS H. LIPSCOMB, DISTRICT ENGINEER

NEGOTIATION WITH INDIAN TRIBES

Colonel LIPSCOMB. Mr. Chairman, my name is Col. Thomas H. Lipscomb, district engineer of the Portland district of the Corps of Engineers. This district is charged with design and construction of the Dalles Dam and all acquisitions of real estate, easements, and reclocations incident thereto.

I should like to give the committee a few facts not previously brought out as to the negotiations under way with the various Indian tribes to compensate them for the inundation within the reservation area of their fishing places reserved to them under the treaties of 1855.

The treaty fishing stations so highly valued by the Indians will not be extensively affected by the reservoir until the summer of 1957. We are glad that already, 4 years before that time, we have been able to reach an agreement with two of the major tribes affected, the Umatillas and the Warm Springs. They have been mindful in these negotiations of the value of their rights and of their obligations as negotiators to protect the rights of their people. However, they have also been realistic in their willingness to negotiate and compromise on small points, and their cooperation has been greatly appreciated.

AMOUNT INVOLVED

Senator ELLENDER. As to those two tribes, how much has been involved?

Colonel LIPSCOMB. Approximately $4 million each for those 2 tribes based on the evaluation of the fishery of $23 million and a plan of distribution, largely based on a per capita settlement.

Senator ELLENDER. How do those tribes compare in number with the Yakima?

Colonel LIPSCOMB. These two tribes are smaller than the Yakima. The two tribes together represent a slightly smaller number than the enrolled membership of the Yakima Tribe.

Senator ELLENDER. What was your yardstick basis of reaching the sum of $4 million?

Colonel LIPSCOMB. We first had to evaluate the total income which the Indians would derive from the fishery if it were not inundated. We had a study by the Oregon State Fish Commission, contribution No. 17, which was published in the last year's hearing of this committee, beginning on page 544, which evaluated that fishery at $23 million based on capitalizing at 3 percent. We gathered additional information which substantially confirmed the findings of the Oregon State Fish Commission.

Then, with $23 million as the value which was being destroyed, we had the problem of how that could best be distributed. We felt that a per capita distribution, in other words, dividing up by the number of people affected, was the soundest one, and while there was some dispute about that, the Warm Springs and Umatillas both felt that they were entitled to a larger share than one based on a per capita settlement. They did agree to a per capita settlement. Initially they wanted equal treatment among the tribes, the same between the Umatillas and Yakimas.

Senator ELLENDER. Irrespective of the number?

Colonel LIPSCOMB. Irrespective of the number. They then proceeded from that point and wanted 25 percent, 25 percent, and 50 percent. Then they receded from that point and took a per capita settlement.

Senator ELLENDER. How many more tribes are there than the two you mentioned and the Yakimas?

TRIBES OPPOSING CONSTRUCTION

Colonel LIPSCOMB. There are two other groups; one of them is the Nez Perce Tribe, and the other is the Celilo group, which is not a tribe. They are not recognized as a tribe.

Senator ELLENDER. Are the Yakimas the only ones actively campaigning against this project?

Colonel LIPSCOMB. They are the only ones that have been actively campaigning except in the last few days I have heard that the Nez Perce are opposing construction of the dam.

Senator KNOWLAND. The Nez Perce had some witnesses that appeared before our committee.

Colonel LIPSCOMB. I planned to discuss each of these other groups that we have not settled with. That was the primary purpose of my coming here. Would you like me to continue?

Senator KNOWLAND. Yes.

Colonel LIPSCOMB. I have with me today Mr. Percy Othus, my special assistant in charge of Indian negotiations, to give some additional details on some of the negotiations which I personally did not attend. I also have with me Mr. J. W. Elliott, who assists us in this field and who through 33 years of experience in the Indian service is especially qualified to understand and deal with Indian problems.

YAKIMA PROBLEM

First I will discuss the problem of the Yakimas, which is the largest group with whom we have not settled. The population is 3,637, but the enrollment is in a constant state of flux, so you may hear other figures. We first solicited negotiations with the Yakima Tribe in our letter of October 22, 1951, which is printed on page 542 of last year's hearings of this committee.

This letter was mailed immediately after the first appropriation for construction was approved by the House and the Senate and before that bill was signed by the President. The Yakimas were reluctant to negotiate, and they did not appoint a negotiating committee until after the second appropriation for construction on the dam was approved in June of last year, rather, in July of last year. However, on the 25th day of July 1952 the general council of the tribe, which is a council in which every member of the tribe can vote, in other words, it corresponds to a town meeting type of organization, after several days of deliberation, in which we participated to a minor extent, delegated to the tribal council, which is a small executive body of the tribe, full and complete authority to take all necessary and appropriate actions for and in behalf of the Yakima Tribe to protect the rights and interests of the Yakima Tribe and to secure just compensation through negotiation or through any other means for any and all damages caused by the destruction and losses of fisheries of the said Yakima Tribe and to execute on behalf of the said Yakima Tribe such releases as may be necessary to obtain full and just compensation and settlement.

AUTHORITY TO CONDUCT NEGOTIATIONS

I would like to enter into the record this copy of that resolution, which is duly signed by the chairman of Yakima General Council and attested by the secretary and the superintendent.

Senator KNOWLAND. That will be done.

(The document referred to follows:)

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF INDIAN AFFAIRS,
YAKIMA INDIAN AGENCY,
Toppenish, Wash., December 30, 1952.

The DIVISION ENGINEER,
Corps of Engineers, United States Army,
Portland, Oreg.
(Attention of Mr. Percy Othus, special assistant.)

DEAR SIR: In accordance with our discussion at the last meeting in Portland, I am enclosing a signed resolution of the general council adopted on July 25, 1952, which delegates authority to the tribal council to conduct negotiations for damages resulting from construction of the Dalles Dam.

The authority of the negotiating team of the tribal council will come up for some discussion at the general council to be held January 7, 8, and 9 because

of the small vote on the resolution. We will advise you of any changes or developments with respect to this matter.

Sincerely yours,

PERRY E. SKARRA, *Superintendent.*

RESOLUTION

Whereas the treaty of June 9, 1855, between the United States and the Yakima Tribe of Indians of the State of Washington (12 Stat. 951), provided in part as follows:

"The exclusive right of taking fish in all the streams, where running through or bordering said reservation, is further secured to said confederated tribes and bands of Indians, as also the right of taking fish at all usual and accustomed places in common with the citizens of the Territory, and of erecting temporary buildings for curing them, * * *"; and now, therefore be it

Resolved, That the Yakima Tribe of Indians at its regularly called meeting of its general council at White Swan, Wash., a quorum being present, this 25th day of July 1952, does hereby delegate to the Yakima Tribal Council full and complete authority to take all necessary and appropriate actions for and in behalf of the Yakima Tribe to protect the rights and interests of the Yakima Tribe, and to secure just compensation through negotiations or through any other means for any and all damages caused by the destruction and losses of the fisheries of said Yakima Tribe; and to execute on behalf of said Yakima Tribe such releases as may be necessary to obtain full and just compensation and settlement, saving and reserving to the Yakima Tribe any and all of the usual and accustomed fishing places and rights along said Columbia River and other places not destroyed by said the Dalles Dam or other dams. It is further

Resolved, That the Yakima Tribal Council is hereby authorized to work with the attorneys of the tribe, tribal consultants, representatives of the Government, and anyone else considered necessary by the Yakima Tribal Council in securing the best possible settlement for all damages to said fisheries, destroyed or to be destroyed by the said action of the United States. Be it

Resolved further, That the tribal council shall advise the general council of all progress made and actions taken at all regularly called meetings of the general council until the matter is finally and completely settled.

Done and dated this 25th day of July 1952 by the General Council of the Confederated Tribes and Bands of the Yakima Indian Nation, a quorum being present, at the Toppenish Creek Longhouse near White Swan, Wash., by a vote of 24 for and 16 against.

GEORGE UMTUCH,
Chairman, Yakima General Council.

Attest:

JOE MENINICK,
Secretary, Yakima General Council.

Approved: July 26, 1952.

PERRY E. SKARRA,
Superintendent, Yakima Indian Agency.

PROGRESS OF NEGOTIATION

Colonel LIPSCOMB. The first meeting with this appointed negotiating committee was set for the week of the 18th to the 22d of August, but was delayed several times at the request of the committee until the 2d of November 1952. At the 2d of November meeting, the chairman of the tribal council said that they were prepared now to negotiate an agreement.

The next meeting was held on the 18th of December 1952 in Portland. At this meeting the Government representatives explained our method of estimating the value of the fishery and our proposed plans and recommendations for a distribution of that evaluation. The tribe at that time stated that they had not completed their studies as to the evaluation of the fishery and were not prepared to take a position, but that they expected to complete their studies shortly. However, they did not schedule any more meetings and began to

make public statements to the effect that they did not intend to negotiate.

I then wrote to the tribe by letter of 14 March, which was previously entered into the record of these hearings this year and told them that we did not question their right to break off negotiations if they wished to and to seek their remedy through litigation or any other method, but we felt that they should inform us if they had changed from their previously announced position that they intended to negotiate.

I was then informed by the attorney for the tribe by letter of March 21, which has also been entered into your record, that they wished to discontinue negotiations for an unstated period with the view to seeing if it were not possible to stop construction on the Dalles Dam. The authority, however, for the tribal council to negotiate a settlement has not been rescinded by the general council and is still in effect.

It is my personal belief that we will be able to negotiate a settlement sometime this fall.

Now I would like to emphasize that the tribe has never stated to the Corps of Engineers either what they think the value of the fishery is or how they think that value should be distributed. Dr. Davidson, their fish biologist, in last year's hearings before this committee on page 447 indicated that he felt the Oregon State Fish Commission evaluation was fair and represented a good basis for settlement. If Dr. Davidson has changed his views on that, he has not informed us of that change or what his present views are.

We will naturally have to know what the Yakimas think they should have and what basis they rely on before a negotiated settlement could be made.

POSSIBILITY OF MOVING DAM TO DESCHUTES

Senator KNOWLAND. Some of the testimony that has been presented before the committee has indicated that they do not want the dam built under any conditions at its present location regardless of this settlement and have suggested that there was no valid reason, at least in their judgment, why it should not be moved, the location, to Deschutes. Could you give the committee the reason why in your judgment it could not be moved, or at least if it were moved what the difference in either the power generation would be or what other factors would make it unwise to make a change of that kind?

Colonel LIPSCOMB. Yes, sir; I can.

First, if you would more the dam, this is a very recent photograph made about 2 weeks ago, the dam would be in here and here, we would lose upwards of $20 million which has already been built into this site and I might say that not that much has been placed, but counting the cost of contract terminations, that is how much would be involved.

Secondly, the Celilo locks, which is an important element of the navigation channel from the Pacific Ocean to Pasco, would have to be reconstructed at a cost of upwards of $50 million. Now these locks bypass the Celilo Falls and were built 75 years ago to standards then current. They represent a bottleneck.

Thirdly, the head loss would involve a loss of power of approximately equal to that generated by Bonneville Dam. The purpose of the dam of course is to get falling water so that you always find them below a falls and not above them.

The last reason is that the fishery would still be seriously affected if you moved the dam to Deschutes, something which I think the Indians have overlooked. Due to the character of the use of electricity, you have high discharges in the day and low discharges in the night. In its present location The Dalles discharges into the pool of the Bonneville Dam, so this present fluctuation is of no importance, but if it were up in Deschutes we would find that the Celilo Falls would be alternately flooded in the daytime and starved at night, and it would be unsafe for fishing and the passage of fish might be adversely affected.

EFFECT ON FISHERY

Senator CORDON. That would then not only adversely affect the passage of the fish, but it would adversely affect the opportunity to catch them?

Colonel LIPSCOMB. Very much so. Their fishery would still be affected if you put the dam at the Deschutes location.

Senator CORDON. I might state to the members of the committee that this is a very unusual type of fishery, particularly for salmon. The fishing is done from rocks along the edge of small portions of the river which come down and break and go down through little channels. The Indians do most of their fishing from little platforms that are built out from the top and in some instances hung on the sides of these channel bluffs, and they require that every fisherman must have a safety rope around him anchored to the shore to safeguard him from accident. From that position he uses a long-handled dip net sort of thing to dip down and catch the fish as they come through on their way over the falls. Of course, if you had this type of water discharge, I can conceive that it would go clear over the top of the thing, and there would not be the channels where they could reach the fish and the element of safety would be entirely gone.

Colonel LIPSCOMB. It would knock down their fishing platforms every day at peak discharge.

That is all I wanted to offer on the Yakima Tribe, sir. I will go to the Nez Perce Tribe unless you have some questions.

NEZ PERCE CASE

Senator CORDON. Mr. Chairman, with respect to the testimony the colonel is about to give, in the hearing the other day, the Nez Perce tribe was here represented by two people, as I understood it.

Of course, I am sure the chairman was in the same situation as myself. It was rather difficult to follow the argument because the people themselves were publicly embarrassed and their English was such that it was difficult to follow, but I gathered from the testimony here that they indicated that the tribe, while believing it had sufficient rights in The Dalles area, had never been contacted by the Corps of Engineers with reference to those rights and had not been at any time represented by counsel. They left an impression that their cause had not been investigated.

I called Colonel Lipscomb and he advised me to the contrary, and I thought the record ought to indicate just what has been done in that field so it will be before the committee.

Senator KNOWLAND. That was the impression that the chairman had, that they almost felt hurt that the Government with whom they

had had friendly relationships over a period of years had made settlements with other tribes and apparently had not given them any notice and had left them out on an appendage, so to speak, without having a chance. If the chairman of the committee perhaps inadvertently got the wrong impression, I would appreciate having the record clear.

Colonel LIPSCOMB. All right, sir. When we started these negotiations on October 22, 1951, which, as I pointed out, was at the time of the initial program for the construction of the Dalles Dam, we addressed a letter to the four tribes who appeared to have treaty rights and also to the Celilo group.

That letter appears in the record of last year's hearings on page 542.

Senator KNOWLAND. Might I ask at this point, when you write these tribes, do you send it by registered mail, or, to whom, for instance, in this particular case, was it addressed?

Colonel LIPSCOMB. It was addressed to the chairman of the Nez Perce Indian Council, Fort Lapwai, Idaho, and was sent through the area director of Indian affairs and through their Indian service, so there is a record of receipt of that letter.

Senator KNOWLAND. Was the letter ever acknowledged?

NOTIFICATION TO NEZ PERCE TRIBE

Colonel LIPSCOMB. I am speaking from memory, but I am confident that it was, because there were subsequent meetings held with the Nez Perce Indians based on this letter.

Senator KNOWLAND. If it is possible without too much difficulty to get the copy of the acknowledgement of the letter and the letter that was sent, I think it might be well to have that in the record.

Senator CORDON. In the event, Mr. Chairman, as a result of the letter, contacts were made or discussions were had there, that might be of substance.

Senator KNOWLAND. The dates and so forth, if that could be furnished, would be helpful.

Colonel LIPSCOMB. After I am finished, Mr. Othus will tell you in more detail about the negotiations. The letter which I sent is already in the record and I will attempt to get a copy of their letter anwering it.

(The information referred to follows:)

CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DISTRICT ENGINEER,
PORTLAND, OREG., DISTRICT,
Portland, Oreg., October 22, 1951.

CHAIRMAN, UMATILLA INDIAN COUNCIL,
Pendleton, Oreg.
CHIEF TOMMY THOMPSON, WYAMS INDIAN TRIBE,
Celilo Falls, Oreg.
CHAIRMAN, YAKIMA INDIAN COUNCIL,
Toppenish, Wash.
CHAIRMAN, NEZ PERCÉ INDIAN COUNCIL,
Fort Lapwai, Idaho
CHAIRMAN, WARM SPRINGS INDIAN COUNCIL,
Madras, Oreg.

(Through: Area Director, Bureau of Indian Affairs, Swan Island, Portland, Oreg.)

GENTLEMEN: The Chief of Engineers, Corps of Engineers, United States Army, has advised this office that the Congress has passed the civil function bill for 1951, appropriating $4 million as the first funds for the construction of the

Dalles Dam, Columbia River, Wash. and Oreg. Construction of this dam was authorized by the United States Congress, under Public Law 516, 81st Congress, 2d session, approved May 17, 1950. The authorizing law specifically provides, among other things, that "projects authorized herein shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements." With this authority and funds now availabe, my present intention is to initiate construction on this important power and navigation dam at the earliest possible date, and I fully expect that the first construction work will be started in April of next year. It will consist principally of rock excavation on the Washington side of the dam site just below Big Eddy. The plan is to complete the installation of the first power units in November 1957, and the lake behind the dam will be created by blocking the river by January 1956. Normal river functions will prevail until that time.

This office recognizes that the dam construction will in time submerge the traditional Indian fishing grounds at Celilo Falls with attendant loss to Indian tribes and individuals. This office is further aware of the obligations on the part of the Federal Government arising out of treaties with the various Indian tribes, and declares its intentions to negotiate with the affected Indians in the spirit of good faith to make them whole for actual losses suffered. Negotiations will be initiated and extended on the basis that considerations to the Indians will be founded on factors which will lead to a fair settlement with the Indians.

In accomplishing these negotiations I intend to give the matter my personal attention to a very large extent and have assigned my special assistant, Mr. Percy M. Othus, to head up the negotiations and devote his entire time on this very important problem. In addition, we expect to add to our staff a man with long and distinguished experience and broad knowledge in dealing with Indian problems. This man will be of the caliber, training and integrity similar to that of a superintendent of an Indian reservation. We will have the help and cooperation of the United States Indian Service, the United States Fish and Wildlife Service, and other interested Federal agencies, as well as the fish commissions of both Oregon and Washington.

This office is presently gathering necessary information and expects, as time goes on, to be in touch with the various interested Indian officials and their representatives. We expect, with the cooperation of the northwest director of Indian affairs, to arrange a general meeting in the not-too-distant future. In the meantime, I want to assure your honorable council and all other individuals of the tribe, of my desire and intention to bringing the negotiations to a mutually satisfactory conclusion as soon as can be intelligently done.

Very truly yours,

T. H. LIPSCOMB,
Colonel, Corps of Engineers, District Engineer.

CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DISTRICT ENGINEER,
PORTLAND, OREG., DISTRICT,
Portland, Oreg., February 21, 1952.

CHAIRMAN, NEZ PERCE INDIAN COUNCIL,
Fort Lapwai, Idaho.
CHAIRMAN, UMATILLA INDIAN COUNCIL,
Pendleton, Oreg.
CHAIRMAN, YAKIMA INDIAN COUNCIL,
Toppenish, Wash.
CHAIRMAN, WARM SPRINGS INDIAN COUNCIL,
Madras, Oreg.

GENTLEMEN: Reference is made to my letter of October 22, 1951, wherein this office advised of its intention to proceed with the construction of the Dalles Dam and indicated a recognition of foreseeable losses to Indian tribes and individuals which will result therefrom. This office also declared its intention to negotiate promptly with the affected Indians to compensate them for losses or damages they would suffer.

Since writing this letter considerable study has been given to the proper approach to an equitable settlement, and conferences were held with tribal officials, the Indian Service, United States Fish and Wildlife Service, and others interested in these studies and discussions. Consideration has been given to many suggested means of settlement.

From these studies and consultations this office concludes that the best approach is now to negotiate separate agreements with each tribe entitled to compensation for fishery losses which will occur when their usual and accustomed fishing places are inundated, probably in 1957, as a result of the construction of the Dalles Dam. To this end we expect to start negotiations in the early future. We desire to limit our negotiations solely to damages which will arise from the construction of the Dalles Dam and to making payments agreed upon from money appropriated for construction of the dam. It is believed that arrangements can be made for paying the entire agreed sum during the construction period and prior to the time that the fishing sites within the reservoir area will be inundated. It is anticipated that in consideration of the payments to be made to a tribe, it will relinquish all further claims against the Federal Government for damages arising out of the infringement of the rights of the tribe through custom and usage or under the treaty of 1855, due to inundation of the usual and accustomed tribal fishing places by the waters of the Columbia River backed up by the Dalles Dam.

Since the treaties of 1855 are agreements with certain tribes rather than with individuals, it is intended to confine the proposed agreement to matters affecting the rights of the tribe as a whole. Any taking of individual real-estate holdings and real property will be handled with the individual Indian owners the same as in any other real-estate transaction, reserving to the individual owner any fishing rights held as a member of the tribe. It is recognized that a number of the Indian tribes have claims pending before the Indian Claims Commission and perhaps other agencies for alleged infringement of their treaty rights arising out of reduction of the Columbia River fishery resource due to construction of dams, river pollution, and perhaps other causes. The negotiation of settlements of such claims is not within the authority of this office, and we will not attempt to recognize any such basis for compensation in these negotiations.

We hope to begin active negotiations in the next month or two with each of the tribes which believes it will be entitled to damages under its tribal treaty rights due to the inundation of usual and accustomed fishing places by construction of the Dalles Dam. To accomplish the first phase of the negotiations, it is requested that an authorized committee of 2 or 3 members be appointed to represent the tribe and that their names be furnished to this office within the next 2 weeks. This committee should be prepared to meet with my special assistant, Mr. Percy M. Othus, in this office within the next 2 months at which time they should be prepared to discuss the legal and equitable grounds upon which the tribe relies in claiming a compensable interest in the fishery. They should also be prepared to discuss poundage, and other factors to be used as a reasonable basis for determining the value of the tribal fishery.

You are requested to advise your preference as to the most convenient week which should be set aside for this discussion.

Very truly yours,

T. H. LIPSCOMB,
Colonel, Corps of Engineers, District Engineer.

DEPARTMENT OF THE INTERIOR,
INDIAN FIELD SERVICE, NORTHERN IDAHO AGENCY,
Lapwai, Idaho, March 5, 1952.

T. H. LIPSCOMB,
Colonel, Corps of Engineers,
Office of District Engineer, Portland, Oreg.

DEAR COLONEL LIPSCOMB: In your letter of February 21, 1952, you requested the names of the members of an authorized committee from the Nez Perce duly appointed to represent the tribe.

This committee consists of: Harrison Lott, chairman of the Nez Perce Tribal Executive Committee; Joseph Blackeagle, secretary; Harry Wheeler, representative of the agency; and Noal F. Caywood, representative of the agency.

This committee can meet with special assistant Mr. Percy M. Othus during the third or fourth week of April should that meet with your approval.

Very truly yours,

M. L. ROBERTSON,
Superintendent, Northern Idaho Agency.

DESIRE TO NEGOTIATE SETTLEMENT

Colonel LIPSCOMB. That initial letter merely indicated our desire to negotiate a settlement. The next letter which we wrote, which was perhaps more important, on February 21, 1952, which also appeared in your record of last year's hearings on page 543, gave our concept of the overall basis of the settlement.

It merely set forth that we were not negotiating a new treaty, we were building a dam, and everyone who owned anything in the dam area that was going to be destroyed, we wished to negotiate with them with a view to settlement according to the fifth amendment, and we also added that we do not take anything without due compensation.

That question was important because the tribes were very eager. From their conversations with us, we knew that they were very eager that our settlement be limited to the construction which would actually have to be done by the Dalles Dam and that other treaty provisions would not be affected.

These letters started negotiations. I will not attempt to give dates. Mr. Othus will try to give you those dates as specifically as he can. He can find them while I am finishing my discussion.

However, as these studies were pursued, it became increasingly apparent that, while we had initially considered these four main tribes alike, they were not alike. It is true that the Nez Perce Indians did sign a treaty at Walla Walla, Wash., in 1855 that contained the same provision as appears in the treaties of the other tribes which protect their usual and accustomed fishing sites.

The difference is in where those usual and accustomed fishing sites were.

ACCUSTOMED FISHING SITES

I think I can show you on this map, which I will bring forward since it is rather small, that there were a number of reasons why there was grave doubt as to whether or not the Nez Perce Indians had any usual and accustomed fishing sites within the area to be inundated by The Dalles Dam.

We have Washington and Oregon. Celilo Falls is located here. This shows for each of the four tribes, the area which they ceded by their treaty and the cross hatched area which was reserved for their reservation.

To get to Celilo Falls the Nez Perce Indians had to travel through the territory of the Umatilla Indians and through the territory of the Warm Springs Indians to get to this site and fish there. The Yakimas had ready access to it. The Warm Springs Indians had ready access and for the Umatillas, it was not too difficult, but just as a matter of geography it created such a doubt.

Senator ELLENDER. Did that tribe at that time or now have any other places to fish?

Colonel LIPSCOMB. Yes, sir. They did have a great many other places to fish which were upstream from this site and which they have listed in previous legal actions. I will give you the reference to that. I have it listed here.

In 1948, a suit was brought by Mr. Simmons to enjoin the continued construction of McNary Dam. The suit was brought in behalf of the

Nez Perce Indian Tribe and the Yakima Tribe and was brought before Judge Driver in the district court of Washington, a United States district court.

In this suit, the Nez Perce Indians gave the locations of usual and customary fishing places and they listed no places within the reservoir area of the Dalles Dam. On the other hand, the Yakimas had a different situation and listed locations in the reservoir area.

Senator CORDON. Colonel, let me interrupt you a moment. That listing was in the pleadings in connection with the litigation brought to enjoin the earliest portion of construction of the McNary Dam, was it not?

Colonel LIPSCOMB. Yes, sir.

Senator CORDON. In that event—and I think we ought to have this in the record in fairness to the Nez Perce Indians—the only portion of their fishing areas that would be disturbed would be that above the McNary Dam, would it not?

Colonel LIPSCOMB. Yes, sir, that is true.

Senator CORDON. So we ought to have in mind that it might be that the failure to list any other places might have rested on the fact that that was the only portion of what they claimed would be disturbed at that time.

Colonel LIPSCOMB. Yes, sir.

NO REPRESENTATION ON CELILO FISH COMMITTEE

Another reason why there is doubt about the claims of the Nez Perce is in the fact that they do not have representation on the Celilo Fish Committee. The Celilo Fish Committee is an official Indian committee at Celilo Falls which regulates the use of the fish among the Indians.

On that fish committee, there are representatives of the Yakima, Umatilla, Warm Springs Tribes and the Celilo group. The Nez Perce do not have any such representation, and do not contribute to the cost of maintenance or to the cost of law enforcement at the fishery.

Senator CORDON. How long has that committee been in existence?

Colonel LIPSCOMB. It was formed and chartered by the Indian Service about 1933. However, it had origin before that in a practice among the people. It would appear that if the Nez Perce Indians had an equal right to the fishery that they would have been given representation because their tribal strength is comparable to that of the Umatillas and the Warm Springs.

OREGON COURT DECISION

Another indication as to the doubtful character of the Nez Perce claims is the fact that the State of Oregon, by Oregon Laws, 1949, chapter 346, recognizes the special treaty rights of these other Indian tribes, does not recognize treaty rights on the part of the Nez Perce.

Another important indication is in a ruling—the ruling was by Judge Fee in the United States District Court of Oregon in the Brookfield case, which has already been entered into the record of this hearing by the Umatilla Tribe—Judge Fee found that the Warm Springs, the Yakimas, and the Umatillas did have a right to entry

over a parcel of land in order to conduct fishing at Celilo Falls and that the Nez Perce did not. This parcel of land is immediately adjacent to their most important fishery and while it does not cover the entire area of the Dalles Dam, it is at the point where the greatest fish take exists, so it therefore has a rather broad implication.

Senator CORDON. Colonel, are you familiar with the case? Were any of the tribes parties to the proceedings?

Colonel LIPSCOMB. The case was brought by Mr. Brown who was the district attorney at the time. Initially he was trying to get access, not only for the Indians, but for sportsmen fishermen and he tried it in the State of Oregon and lost.

The case was taken to the United States court and tried only on behalf of these Indian tribes. He tried it on behalf of all of them. It was won on all of the Yakima, Warm Springs, and Umitilla Tribes and lost with respect to the Nez Perce. Detailed testimony was taken as to the traditional rights of these tribes in the Federal court.

Senator ELLENDER. Did I understand you to say a while ago you had settled with the Nez Perce?

Colonel LIPSCOMB. No, sir, we have not.

Senator ELLENDER. You have negotiated with them?

Colonel LIPSCOMB. We have negotiated with the Nez Perce; yes, sir.

SETTLEMENTS

Senator ELLENDER. You did mention two tribes with which you settled?

Colonel LIPSCOMB. The Umatillas and Warm Springs; yes, sir.

Congress in many acts has referred to the tribes having rights there and in these cases has never referred to the Nez Perce. In 1888 Congress appropriated $3,000 to buy lands at Celilo for the Indians, but the Nez Perce are not mentioned. The reference is 25 Stat. 235.

In 1917, Congress appropriated $5,000 to purchase land for the Middle Oregon Indians with no mention of the Nez Perce. This is 39 Stat. 986.

In 1929, the War Department transferred 7.4 acres to the Secretary of Interior for use of the Warm Springs, Umatillas, and Yakimas. No mention was made of the Nez Perce. That is 45 Stat. 1158.

In 1947—this is 61 Stat. 466—the Government purchased 34.9 acres of land for use by the Umatillas, Yakimas, and Warm Springs, and the Nez Perce were again not mentioned.

HOUSE TESTIMONY

In testimony before the House Appropriations Committee in May 1951 on page 683, part 2, Mr. Harrison Lott, a Nez Perce official testified that the Nez Perce do not have as much fishery rights on the lower Columbia River as the other tribes.

There is a great deal of evidence there to cast grave doubt on the treaty rights of the Nez Perce.

On the other hand, it is a fact that today the Nez Perce Indians do fish there and take a substantial number of fish, although it is not proportional to what the other tribes are taking.

When we tried to decide how we should negotiate in order to make the most equitable settlement we took from our appraised value $1

million and set it aside in our own bookkeeping so that we would have some money we could make a settlement with the Nez Perce if it was found that a settlement was justified. We believe that the interest is a lesser interest if any and is not sufficient to justify their being included on a per capita basis.

Senator CORDON. Colonel, can you advise the committee as to whether in these negotiations that you had with the Nez Perce Indians, they were represented by counsel?

Colonel LIPSCOMB. If you do not mind, Senator Cordon, I would like to have Percy Othus answer that question when he testifies, because he conducted those negotiations in person.

Senator CORDON. All right.

CELILO INDIAN TRIBE

Colonel LIPSCOMB. That is all I have to offer on the Nez Perce Tribe and I would like to pass now to the Celilos.

It is essential to understand that the Celilo group is not a tribe, which I mentioned before. They are a group of Indians that live in the vicinity of the falls and who are especially dependent on this fishery for their livelihood, but they are not organized as a tribe. Among those Indians who live at the falls are, however, a considerable number of Indians who are enrolled in the Yakimas and other tribes.

There are about 150 of them who are not enrolled in any tribe. Those who are enrolled as members of the treaty tribe will be compensated as a part of their tribal settlement. The unenrolled Indians pose a special problem which is rendered especially difficult because of two things:

NEGOTIATION DIFFICULTIES

First, the lack of any organization that we can deal with, and, the second, the lack of a treaty specifically applicable to those Indians.

Nevertheless, these Indians and their forefathers have been especially dependent on that fishery and this has been recognized by the other tribes who have a treaty interest in this fishery.

With reference to organization, we have tried to solve that problem by asking the Warm Springs Tribe, which is the nearest tribe, if they would include the unenrolled Celilo Indians in their settlement and thereby simplify matters. The Warm Springs Indians were willing to do that without any extra legal fees or other expenses, but the Celilos would not buy it.

A Portland lawyer has tried on his own initiative to organize a tribal group among the Celilos during the past year. However, he insists on attempting to organize the group to include both the unenrolled Indians and some enrolled Indians. It is obviously unacceptable to make two settlements with the same Indians and therefore we are unable to cooperate with his plan.

Pending settlement of the organizational and legal problems involved, we have planned to withhold a per capita share for the unenrolled Celilo Indians and, in addition, put aside a reserve of $120,000 to deal with special problems which may be involved, because these Indians do not live on a reservation; they live right there at Celilo Falls.

This program was considered equitable by the Umatillas and Warm Springs Indians and was part of the basis for the settlement which we made with them.

As to the other point, the lack of a treaty specifically reserving the fishing rights of the Celilos, we do not have a final answer. Many of these Indians are descendants of Indian scouts. They could not return to their people on the reservation because Indian scouts were not very popular with the other Indians. They were given direct allotments of land from the public domain.

Because the Celilo group is unorganized, is not specifically covered by a treaty, and is especially dependent on the fishery it is very desirable that we be permitted to compensate them for the loss of their fishing sites to which they have rights established by custom and usage.

Senator CORDON. Last fall during the congressional recess, I discussed this matter at length with the Corps of Engineers at Portland, Oreg., and drafted language for the bill that would direct and authorize a settlement for these overall factors, including the Indians that do not have any basic treaty rights but have ancient usage rights, and the Nez Perce if we find that they have the rights under the treaty or otherwise.

PROPOSED SETTLEMENT LANGUAGE

This is the proposed language to expedite in an orderly way the settlement with the various Indian tribes.

Senator KNOWLAND. That will be made a part of the record at this time.

(The information referred to follows:)

Provided further, That funds appropriated herein may at the discretion and under the direction of the Chief of Engineers be used in payment to the accounts of the Confederated Tribes of the Yakima Reservation; the Confederated Tribes of the Warm Springs Reservation; the Confederated Tribes of the Umatilla Reservation; or other recognized Indian tribes, and those individual Indians not enrolled in any recognized tribe, but who through domicile at or in the immediate vicinity of the reservoir and through custom and usage are found to have an equitable interest in the fishery, all of whose fishing rights and interests will be impaired by the Government incident to the construction, operation, or maintenance of the Dalles Dam, Columbia River, Wash. and Oreg., and must be subordinated thereto by agreement or litigation.

POSSIBILITY OF SETTLEMENT WITHIN ESTIMATED COST OF DAM

Senator CORDAN. I have one other question, Colonel Lipscomb. I asked you today and I want to ask you again for the record and get your answer for the record, based upon the construction experience which you have had to date with respect to the Dalles Dam and your latest figures, can the settlement with the Indians predicated upon the data that you now have as to the amount thereof be made within the present estimated cost of construction of the Dalles Dam?

Colonel LIPSCOMB. Yes, sir, it definitely can.

Senator CORDAN. In other words, there will not have to be a revised estimate raising the construction price in order to take care these settlements?

Colonel LIPSCOMB. No, sir.

General CHORPENING. We included that, Senator, in our testimony.

Senator CORDAN. I wanted it in the record. Thank you very much.

Senator KNOWLAND. Thank you.

Senator CORDON. The next witness is Mr. Othus.

PORTLAND DISTRICT CORPS OF ENGINEERS, IN CHARGE OF INDIAN NEGOTIATIONS

STATEMENT OF PERCY M. OTHUS, SPECIAL ASSISTANT TO THE DISTRICT ENGINEER

DIRECT NEGOTIATIONS

Mr. OTHUS. My name is Percy M. Othus and I am a civil engineer in the employ of the Portland district of the Corps of Engineers.

Under the able direction of Colonel Lipscomb and with the assistance of Mr. Elliott, I have conducted most of the direct negotiations with the various Indian tribes that will be affected by the construction of the Dalles Dam.

Senator CORDON. You mentioned Mr. Elliott. That is Jasper Elliott, formerly superintendent of the Warm Springs Reservation and prior to that, of several other reservations, and a long-time employee of the Bureau of Indian Affairs; is that correct?

Mr. OTHUS. That is correct, he has been most helpful.

Our dealings with the Indians have generated a sympathetic attitude toward them and certainly we want to be fair with them and fair with the Government in these dealings. We have undertaken and accomplished much research, both historical research and indications as to the value of the fishery.

ESTIMATED VALUE OF THE FISHERY

We have determined, as Colonel Lipscomb said, that the total value is in the neighborhood of $23 million and we have attempted to negotiate with the Indians, dividing up the $23 million, and make a complete settlement for their losses.

I feel that Colonel Lipscomb has given the facts, especially concerning the two tribes, the Yakimas and the Nez Perce, and it will not be necessary to discuss that in further detail.

Senator CORDON. We would like to have you discuss the Nez Perce to the extent of your negotiations with them, Mr. Othus.

Mr. OTHUS. I will, sir.

Senator CORDON. I think such a statement is particularly pertinent at the moment.

Mr. OTHUS. I would observe that the Indian officials are all well-informed individuals and in most cases they have competent attorneys and in some cases competent fish biologists who advise them intelligently. They also have many sympathetic friends, some of whom I am certain are prejudiced in their opinions and in many cases are not too well informed on the problem.

NEZ PERCE NEGOTIATIONS

With respect to the Nez Perce negotiations, the question has been raised here as to whether or not they might have received our letters indicating our intention to negotiate with them. I can say positively that they did receive the letters and in response thereto appointed an official committee to negotiate with us. Shortly after—I am sorry I do not have the exact dates but it was early in 1952—they sent a delegation to Portland to undertake the negotiations. We spent a

full day discussing the problems. They indicated their belief that they had a compensable interest in that fishery and we told them of our approach in trying to establish the values and our definite intention to settle with all the Indians on a fair and equitable basis, so there is no doubt but what they received that letter and acted upon it.

(Letter referred to dated March 5, 1952, was later inserted in Colonel Lipscomb's testimony.)

The question was also raised as to whether or not they were represented by an attorney, and I may say that they are the only tribe who, up to the present time, is not represented by an attorney on the Dalles Dam problem.

I can explain that by saying that the legal counsel for the Nez Perce Tribe was the late Mr. Kenneth R. L. Simmons who was also attorney for the Yakima Tribe, and since the interest may conflict, he could not act for them on the Dalles Dam negotiations. That is the way I understand it.

In addition to the formal meeting that I have previously described, I can say that we have visitied the Nez Perce headquarters on numerous occasions. They are located up in northern Idaho, up around Lewiston, a long way from the fishery. I have become acquainted with the officials and with a good many of the tribal members. I call particular attention to one meeting where we appeared before the general council, which is all of their membership, and some 200 Indians were present. That was last winter, or early this year, and at that meeting, we explained, as Colonel Lipscomb has explained here, that our research and our investigations indicated that their interest was not so well defined as the other tribes. They, of course, were disappointed at that, and agreed at that meeting that they would produce and show us evidence conclusively, if possible, that their interests were on a par with the other tribes, so in substance the negotiations are at a standstill pending receipt of this documentary evidence which they may furnish.

NEGOTIATIONS OPEN

I think it should thus be clear to the committee that the negotiations are open and that at no time have we attempted or given the least thought to terminating negotiations with those people.

In our negotiations in dealing with the Indian people, particularly the officials, we find that they have a tendency to magnify the proposition that affects them, sometimes to the detriment of other tribes. This is evidenced, I think by the Yakima Tribe claiming sole and exclusive rights to that fishery, which Colonel Lipscomb spoke of and gave reference to.

Senator CORDON. You know, Mr. Othus, long ago Elbert Hubbard said that he who tooteth not his own horn, his horn isn't tooted.

Mr. OTHUS. That is right. Our dealings with the Yakima Tribe have been for the most part on an informal basis, but they have been intensive. We have made many trips to their agency which is located in Toppinish, Wash. We are well acquainted with the officials and with the superintendent over there and have enjoyed friendly and courteous treatment at their hands.

Colonel Lipscomb has described the fact that they have agreed in a general council meeting to negotiate with us. Mr. Elliott and I

attended that meeting, which was last July, and I may say that it was a rather stormy meeting, attended by well over 200 Yakima Indians. Our position was explained in detail, that we were ready to negotiate with them, and on the advice of their competent attorneys and on the statements of many of the Indians, they concluded to negotiate with us, since they felt that the dam was an assured fact.

Subsequent to that and late last year, they made an about face and concluded to generate some publicity to try to stop further appropriations for the dam, and have, as Colonel Lipscomb said, suspended negotiations.

POSSIBILITY OF SATISFACTORY SETTLEMENT

I feel very confident that once this appropriation matter is settled that the Yakima Tribe, and the officials themselves, will pick up the negotiations and I have no doubt but what the matter can be settled through negotiations and satisfactorily to all concerned.

NO FORMAL NEGOTIATIONS WITH CELILO TRIBE

With respect to the Celilo group, we have had very little and in fact no formal negotiations with them. We have visited up there with Chief Tommy Thompson and his people, but we find that most complex, as Colonel Lipscomb described, with them trying to organize themselves into a group consisting of unenrolled Indians and, at the same time, including enrolled Indians, the Yakimas, Warm Springs, and other tribes who will participate in the settlement which we make with them.

I understand that they appeared before this committee within the last few days and we know that one of the men, who testified here, John Whiz, is a member of the Yakima Tribe. That fact should evidence that the dealings with them are difficult.

Senator ELLENDER. You mean with the unorganized group?

Mr. OTHUS. Yes.

Senator ELLENDER. Is that unorganized group composed of Indians from all of these tribes around that area, the Yakimas, the Umatillas and so forth?

Mr. OTHUS. Part of them, but some of them are not enrolled in any tribe.

Senator ELLENDER. There will not be a duplication of payments there, will there?

Mr. OTHUS. Sir, that is the problem. If they are allowed to form a group including enrolled members in other tribes, we certainly stand the chance of double payments which we must avoid and will avoid.

Senator CORDON. In other words, you cannot do anything with respect to what kind of organization they want—that is up to them—but when you deal with the organization that they set up and prepare to make a settlement with the Government that settlement would be based upon the number of Indians in that group who are not enrolled in one of the other three reservations; is that correct?

Mr. OTHUS. That is correct. I will only add that we are hopeful with the cooperation of the local office of the Indian Service that some organizational group can be formed up there with which we can negotiate and finally make a settlement.

Thank you for your courtesy.

Senator CORDON. Thank you very much.

Senator KNOWLAND. If it is agreeable with the committee, Senator Malone, I know you have other commitments. If you have a statement that you want to make, we would let you proceed.

Senator MALONE. I have a very short statement in regard to flood control in a very strategic area and has to do with the construction of Pine and Matthews flood-control dams which were authorized by the 1950 Flood Control Act.

Senator KNOWLAND. Yes.

PINE AND MATTHEWS DAMS

STATEMENT OF HON. GEORGE W. MALONE, A UNITED STATES SENATOR FROM THE STATE OF NEVADA

GENERAL STATEMENT

Senator MALONE. Mr. Chairman, I appreciate the opportunity. I do have to return to another committee.

Mr. Chairman, I am speaking in support of an appropriation for two small dams located in southeastern Nevada. They are the Pine and Matthews Dams to be constructed in Lincoln County, Nev., just above the town of Caliente in what they call the Meadow Valley Wash area.

The construction of these dams has already been authorized by the Flood Control Act of 1950. The total cost of the project, including these two small dams, is very nominal and the costs for the first year would be very small.

ESTIMATED COST

The estimated cost of construction of the Pine Canyon Dam would be $1,450,000 complete. The Matthews Canyon Dam would be $755,000. The total is $2,205,000. According to the Army engineers, only $120,000 would be necessary to be appropriated for this year. An appropriation of that amount would prevent delaying the start of the project a full year.

That amount will be needed at the outset for planning and preliminary work. The cost of the first year's construction—which would begin next year—would be $1 million, and the cost for the second and final year's construction is estimated at $1,085,000.

Those amounts for the 3 years, $120,000, $1 million, and $1,085,000, total $2,205,000.

No appropriation for construction of the two dams was included in the Public Works Committee's budget this year.

I might say, Mr. Chairman, that the Flood Control Act of 1950 was a general authorization bill passed right in the middle of the Korean conflict, so there was an order that no construction work would be done at all except that of an emergency nature.

This project was considered to be of an emergency nature and the reasons were clear, Mr. Chairman:

The Union Pacific Railroad, as you know, runs between Salt Lake City and Los Angeles and traverses this part of southern Nevada, through Caliente and Las Vegas, and on into Los Angeles. However,

from Caliente, Nev., near the Utah line this Meadow Valley Wash is a deeply eroded canyon. There is no other place for the water to go except down the wash and, although for practically all the year the wash is dry, there are floods which cause great damage.

FLOOD DAMAGE

As a result of the disastrous flood of January 1910 the Union Pacific's main-line roadbed was washed out and railroad service was interrupted for more than 6 months. A flood in March 1938 inundated the tracks and severely damaged the roadbed, interrupting traffic for about 2 weeks.

This transportation is very vital in the case of an emergency such as we now have in Korea or if we became involved in a global war any disruption in traffic would be disastrous. It is disastrous in peacetime since this is the only transcontinental railroad from east to west from Reno, Nev., in the north to Phoenix Ariz. in the south—and is the only railroad serving that great area including the Hoover Dam, Lake Mead area which includes many indispensible industries in war and peace times.

These two dams are purely flood control—they have no gates. There is no irrigation and nothing is held back for storage of power. It is purely flood control. The outlet is gaged so that the more head that comes to the outlet, the more water goes out, but the dams will retard the floods to a safe flow for the railroad transportation and the Muddy River agricultural land.

The Army engineers have worked out the technical details.

The floodwaters have on numerous occassions ruined not only valuable farmlands, irrigation intakes, and canals but have, as previously explained, disrupted traffic over both the continental railroad and the highways.

Floods have made the country roads impassable for movements of farm produce to markets and for transportation of children to public schools. These proposed dams are designed to do away with that particular hazard to the agriculture land and the general transportation of the area.

The sum of $120,000 is a relatively small amount of money which would prevent the delay of this important project another year. Of course, we never know, another flood might not come for 10 years, but it is an area where it might come this year.

Mr. Chairman, they did put these two dams on the emergency list for the reasons mentioned. However, an appropriation was never set up for the work.

AGRICULTURAL AREA

I might say that the Muddy and Virgin River areas are the only agricultural land of any extent in all southeastern Nevada. The Muddy River runs through this area farther south and into the Virgin River which is a tributary of the Colorado River and now, of course, empties into Lake Mead.

This agricultural area furnishes foodstuffs and farm products to from 45,000 to 50,000 people in Clark County which includes Las Vegas, Henderson, and Boulder City, so it is a very important area.

Mr. Chairman, it is a necessary project and being of such small cost, to prevent the delay of another year, it is my opinion, that it should be

included in your program. I would appreciate it if the committee would take a good look at this project. Thank you.

Senator KNOWLAND. Thank you. We are very glad to have you appear before us.

(The following statement was subsequently furnished by the Corps of Engineers:)

As explained by Senator Malone, these two projects were authorized by the Flood Control Act of 1950 (Public Law 516, 80th Cong.). The Pine Canyon and Mathews Canyon projects, when complete, will protect long sections of the transcontinental Union Pacific, the city of Caliente, and about 10,000 acres of agricultural land against serious damage from most floods on Clover Creek and Meadow Valley Wash. Estimated cost of these projects, as of July 1952, was: for Mathews Canyon, $755,000; and Pine Canyon, $1,450,000. No construction or advanced planning has been undertaken to date. It is estimated that construction, to include the necessary period of advanced planning, will require approximately 3 years providing funds are made available in an orderly manner. During the first of the 3 years, planning funds will be needed in the amounts of $40,000 for Mathews Canyon and $80,000 for Pine Canyon.

Senator KNOWLAND. Congressman Edmondson is here and he has to return to the House and as a matter of courtesy between the two Houses—I know that he is busy over there also—we would be glad to have a statement from him. I will say that any statement you have may go into the record and then you may proceed. You may either brief it or read it into the record, as you prefer.

STRAWN DAM

STATEMENT OF HON. ED EDMONDSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

FLOOD CONTROL OF NEOSHO RIVER

Representative EDMONDSON. Thank you, Mr. Chairman. I appreciate very much this opportunity to appear before your committee.

My name is Ed Edmondson. I am the Representative from the Second District in Oklahoma and I am particularly interested in the flood-control program which your committee has so much to do with and the proposed appropriation to carry out construction of the Strawn Dam near Burlington, Kans., on the Neosho River.

This is the dam that the people of that area have been asking for for 30 years and it is part of a plan which the engineers and the Soil Conservation Service have both approved in the past. The people are convinced it is urgently needed to stop the terrible flood damage which this Neosho River has been doing to the people of Kansas and the people of Oklahoma for many years.

RECENT LOSS

Most recently, in 1951, the city of Miami, Okla., which is located in Ottawa County in the Second District which I serve, alone suffered a loss of $2,500,000 from destruction by the rampaging waters of the Neosho River. In that flood, the Board of County Commissions of Ottawa County estimated the total damage to their county at $5 million, which is a terrible loss to suffer in a single year from such a catastrophe.

However, this was not the first time it happened. There have been floods of this nature on numerous occasions in the past and I am

very fearful with the heavy rainfall that we are at present having in that area of our country we face another danger of a similar kind this year.

I am sure that you have already heard something of the damage suffered in the State of Kansas from this 1951 flood when thousands of people in the two States were driven from their homes as a result of this Neosho River flood of 1951. I do not believe there can be any question as to the need for flood control and regulation of the stream flow on this river.

The figures of the engineers show that this dam will more than justify its cost, qualifying fully for construction under all important standards set up by the engineers, and I respectfully urge that this committee report favorably on the request for appropriations for the construction of Strawn Dam.

In all fairness to the Army engineers, I should state that I spoke a few minutes ago to General Chorpening and he told me at that time that there had been some new figures brought to the Army engineers' attention as to the cost factor and that for that reason they were not pressing for immediate construction money for this dam.

The interest of the Army engineers in this instance perhaps are not as urgent as ours are, but I do feel that this community's need for protection from floods is something that should be given immediate consideration.

Senator KNOWLAND. What is the total estimated cost, Congressman?

Representative EDMONDSON. In view of General Chorpening's statement to me this morning, I perhaps should refer that question to him.

TOTAL ESTIMATED COST

General CHORPENING. The total estimated cost as we have it now, Mr. Chairman, is $38,034,000.

Senator KNOWLAND. What is the cost-benefit ratio?

General CHORPENING. If I recall, there are a series of dams on that watershed. There are 4, 3 at the headwaters, and this one farther down, and this is the largest of the 4, so the B–C ratio, as I recall it, was on a basinwide rather than on a single structure, but it is around 1.5, as I recall it. I want to check that and if there is an appreciable difference, I will change it.

Senator KNOWLAND. Have you had any planning money?

General CHORPENING. Yes, sir; we have planning money on this.

EXTENT OF PLANNING

Senator KNOWLAND. How far has the planning gone along?

General CHORPENING. Pretty well along. We do have some planning funds remaining and we are not asking in this appropriation request for any planning funds because we have enough remaining to be able to further refine our planning and estimates, looking toward construction at such time as criteria would permit us to ask for construction funds.

As Mr. Edmondson has said, our estimated cost, as we see it now, will be considerably in excess of what the original estimate was at the time of authorization and we want to be certain of our facts before

we would come to the Congress if criteria permitted us to come for new construction.

Senator KNOWLAND. Thank you very much.

Representative EDMONDSON. The criterion that I am most interested in is probably not the primary concern to the engineers, but it is the criterion of need and protection to this area both as to water supply in time of drought and as to protection to their homes, business, and farms in times of flood. Certainly I think the general would not contest for one moment the fact that that criterion is present and that there insurgent need for it.

General CHORPENING. May I say that the criteria of which I have spoken are the criteria that we have in connection with the submission of estimates.

Senator KNOWLAND. The committee recognized that you were referring to the criteria that had been expended to you. I think we have had testimony here, and some of the committee members have pointed out that there are many other factors, including the damage and the economic benefit to the community that needs to be considered in the overall picture.

General CHORPENING. I should say this further, sir. This was in my district when I was district engineer in Tulsa. I have made many trips through this valley and if there is any valley of which I am aware that there are very serious flood problems and I recognize they need help, I doubt that there is another one where I have more personal information.

Senator KNOWLAND. Thank you.

Representative EDMONDSON. I can assure you that is true. Could I add one statement here?

Senator KNOWLAND. Yes.

Representative EDMONDSON. This is one of several dams in which the people of my district feel there is an urgent need for protection of their farm lands, homes, and businesses from the ravages of floods, and I am sure that a strong case can also be made for early construction of the Toronto Dam on the Verdigris River in Kansas which has done great damage in four counties in my district and on the dams being urged by Senator Carlson of Kansas and my distinguished colleague, Representative Hope of Kansas, on the upper tributaries of the Caney River.

Senator KNOWLAND. Congressman Miller is here and I understand that the House is going to vote on the agriculture appropriation bill probably in the not too distant future. As a matter of courtesy in common between the two Houses if you care to make a statement now, the entire statement may go into the record.

If you care to brief it or make such a statement as you desire, the committee will be glad to have you appear at this time.

SOIL AND WATER CONSERVATION

STATEMENT OF HON. HOWARD S. MILLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

GENERAL STATEMENT

Mr. MILLER. Mr. Chairman and members of the committee, I have here an abbreviated statement which I had not intended to make. The explanation is that the secretary was to bring over to the floor of

the House the complete statement, but he did not arrive, and I had agreed to be here at a certain time.

Senator KNOWLAND. I would say to the Congressman that the Chair will assure him that we will keep the record open if the Congressman will get that over to us some time late this afternoon. If you will send it to the clerk of the committee, it will be included in full in the record. Temporarily, you may put this statement in and then make an oral statement if you care to do so. I want to give you the opportunity to appear and not be tied up here with this committee.

Representative MILLER. I believe that the statements that have been here submitted to me just now practically cover what I had expected to bring before the committee and if you are willing that I proceed, I will at this time. I am expected to appear before the House on a certain issue at some time and I need to get back.

Senator KNOWLAND. I appreciate that. The Chair would like to say this: That due to the fact of the absence of Senator Taft from the Senate Chamber today, I am acting as floor leader and I am going to have to leave in just a few minutes, but I will ask Senator Cordon to carry on the meeting for me. I can assure the Congressman that I am acquainted with the problem that I think he is going to testify on and I will read his entire testimony. However, if I do leave in a few minutes, it will be because I will have to be on the floor at the opening of the Senate.

Representative MILLER. I understand that, Senator.

I am grateful for the opportunity of appearing before you to present my views upon what I consider one of the most important problems that confronts the people of this Nation, that of soil and water conservation. By the term "conservation" as I shall here use it, I shall refer to the practical use of rainfall that is needed and minimizing any damage that may result from excessive amounts.

As applied to the land, I shall refer to any practical measures to save the soil such as terraces, waterways, and drop inlets.

VALUE AND SCARCITY OF TOPSOIL

I should like to make some fundamental statements upon which I am sure we can all agree and from which we may arrive at conclusions of unquestionable certainty. The few inches of topsoil on about one-eighth of the surface of the earth, aside from the limited amount of seafood available, is the sole source of plant and animal life.

This fertile soil was thousands of years in formation through the agency of air, sunlight, and water upon plantlife. This soil is held upon the earth, resisting wind and water erosion only by vegetation, mostly trees and grasses.

Following the destruction of forests and grass, the soil will shortly be washed into the sea unless measures are taken to prevent it. The invention of modern tools and machinery have made possible the turning of the sod and cutting of the forests at a rate and to an extent never before possible in the history of mankind. The American people have taken advantage of this situation to such a degree that our soil has been exposed and eroded to a serious extent, so serious that had it not been that this continent had never before been exploited by any race capable of turning the soil we would even now be in a serious situation as regards food supply. In other words, had it not been for

its superabundance there would even now be very little soil left in this country.

I used the word "destruction" of the soil for the reason that once the soil particles exposed to the impact of raindrops falling at the speed of 4 meters per second have been torn apart and floated over the fields into the ditches skirting the streams, they are practically lost, not only to that field, but to all the earth so far as mankind is concerned.

They may float out upon overflow land where they are often more a nuisance than a benefit, but, in the main, wherever they may lodge, they are useless.

FARMING OPERATIONS WITHOUT RISK OF EROSION

The great problem then is how to conduct necessary farming operations, which entails exposing the soil to the dangers of erosion, with the least possible risk. The problem has now been narrowed down to that of the best method of controlling the rain as it falls upon the earth.

It would seem to be sensible to begin the solution of the problem where the danger begins, namely, where the rain falls. In trying to solve this problem we must bear in mind that the power behind the raindrop is the pull of gravity toward the center of the earth. We have no control over this until the rain strikes the soil and begins its journey by the steepest route, and consequently the swiftest pace, toward the sea from which it came.

Here is where the wisdom and the ingenuity of man must come into play.

We long since learned that the carrying capacity of running water is in direct proportion to the speed of its flow. Our problem then is to slow down that speed. We must make it walk around the hill instead of running down the hill. With modern machinery, this can be swiftly and efficiently accomplished by terracing the land. This, the farmers, with some Government aid, are doing at a rapidly increasing rate.

These terraces lead into prepared waterways which carry the water to a lower level. These too the farmer has prepared with some Government assistance.

In most cases, there arises a situation where the water must be conducted to a lower level. Here it must be conducted through a tube or a prepared channel. This is an added expense, but absolutely essential to prevent forming a ditch in the waterway.

GOVERNMENT ASSISTANCE

In this also there has been some Government assistance.

You will observe, members of the committee, that I have made mention of the fact of Government assistance in soil-conservation practices on privately owned land. This practice, in my mind, has been fully justified on two different grounds:

First, the general public under the prodding of leading agriculturalists and conservationists for several decades have finally been made aware of the danger confronting the country and insisted that something be done.

Secondly, the operators on the land were, and still are to a great extent, either renters or landowners carrying a burden of debt. In either case, they are not in a position to put out any great amount of money for soil-conservation practices. In many instances, it is a matter of governmental participation or no soil conservation.

There can be no doubt that Federal assistance has greatly accelerated the soil-conservation practices.

I can conceive of no circumstance under which such contribution would be more justified. We now have the excess of water that the field upon which it fell cannot absorb in its natural channel and, after much delay, on its way to the sea, again by the shortest, swiftest route.

By approved conservation practices we have prevented the first and greatest damage resulting from excessive rainfall: the carrying away of the soil.

Up to this point, we have not averted that other damage incident to rainfall: the danger of flooding the river plainsbe low. Fortunately, modern earth-moving machinery has made this quickly and easily possible. It is not necessary. It is necessary only for competent engineers to determine suitable situations for detention dams to figure the amount of water that can be temporarily impounded with a given dike and the size of the outlet to control the flow so there can be no overflow of the natural channel below.

CONTROL OF WATER FLOW

Nothing could be simpler. It is purely a problem in arithmetic and in the hands of men trained to do the work. It is doing on the upland, and before the water has accumulated unlimited power in the river channel, what, through the years, has been attempted on the river channel. It is meeting the enemy where his forces are dispersed rather than where they are concentrated, just as any good general would do.

It is meeting the danger at its source. It is putting first things first.

This system, members of the committee, I submit to you, is mathematically sound. Excepting in cases of unusual conditions such as not to be foreseen or guarded against, it must be effective. It is not designed to control floods. It is designed to prevent floods.

It has been tried out on a small watershed, in fact 2 watersheds in Oklahoma, where it has proved 100 percent effective. If it will work on 1 watershed, it will work on all watersheds.

With variations in detail, the problems are identical and the results must be the same.

If the small streams are not permitted to overflow, the larger ones cannot overflow.

I would like to make mention of this fact here: That this program which is now being advocated by the Soil Conservation Service is exactly the same program that the Army engineers have been trying to practice for years past on the main channels, excepting that we are doing it on the tributaries rather than on the river channels. Here it can be done much more easily and effectively.

If tributaries do not overflow the rivers cannot overflow. This plan is in fact an application of the old plan applied in a new and more effective way and in a different locale. This solution of man's

greatest problems, the saving of the soil and prevention of floods by one integrated program, is so simple as to be almost incredible.

We are tempted to ask ourselves why it was not thought of earlier and before so great damage has been done. The answer is that it is only in the last few years that machinery has been developed that makes such a gigantic undertaking psosible. We now have the know-how and we have the means. It is only a matter of application of up-to-date knowledge and methods.

We do not travel as we did 50 years ago. We do not farm as we did 50 years ago. We do not conduct wars as we did 50 years ago. Why should we endeavor to prevent floods in the same manner that we did 50 years ago? Our Nation prides itself on being up to date. They why use antiquated methods in controlling the water.

Big dams on river channels, in mountain regions, or in areas of waste or desert lands, if needed, have their place, but in a rich agricultural area where they will necessarily flood thousands of acres of the best lands of the Nation, they are outdated and out of place.

SERIOUSNESS OF CUT IN APPROPRIATIONS

Honorable members of the committee, I am sure you realize the seriousness of the problem I am discussing and that it would be unwise to cut appropriations to a degree to impair progress in a sound soil-conservation and flood-prevention program. Money spent to prevent the irreparable loss of our soil will be returned in annual dividends to our children and our grandchildren as long as this Nation may endure. The better the land we leave to our children the longer this Nation will endure.

There is one further consideration. Sometime, may we hope in the not too distant future, peace will return to the world. When that time comes, hundreds of thousands of young men will be leaving defense plants and soldiers will be donning civilian clothes. All will be looking for jobs. If we will get this soil-conservation problem away to a good start, and this year 1953 is none too soon, will not an enlarged program of soil conservation and flood prevention be a great shock absorber against unemployment and depression?

OPPOSITION TO TUTTLE CREEK DAM

In conclusion, members of the committee, I am sure you will realize that the incontrovertible argument that I have set forth in opposition to big dams on river channels for the sole purpose of flood control applies with particular force to the proposed Tuttle Creek Dam on the Blue River in Kansas.

This dam will cause a periodic inundation of more than 50,000 acres of the most productive land in the United States. Its construction became the major issue in the congressional campaign of the First District.

I was the first Democrat ever to be elected from that district which is normally 2 to 1 Republican. The fact that both branches of the Kansas Legislature memorialized Congress not to appropriate funds for the construction of this dam shows where the people of Kansas stand on this issue.

The further fact that the Bureau of the Budget has denied funds for its construction shows where this administration stands.

I shall be glad to answer any questions that I can answer that may be submitted by members of the committee.

Senator CORDON (presiding). Thank you, Congressman. The committee has gone over the matter, as you know, on a number of occasions. We appreciate very much your statement.

Are there any questions?

Senator ELLENDER. No.

Representative MILLER. I might add this statement also: That I am not directly interested in this Tuttle Creek Dam construction in one way or another. It is purely by way of accident that I became interested in this. It is purely by way of accident that I am a member of Congress. The story is simple and it is short.

As a member of the Soil Conservation Association in Brown County, I was asked to call a meeting to see whether the people there would be interested in making a total conservation program on Walnut Creek in my county and I was asked to conduct a meeting.

We had a speaker down from Lincoln, Neb., Mr. Matske, sent down there by Mr.cConnell, whom you may know, of the State Journal. After he made his speech and I asked the people for an expression, with one single dissenting vote they expressed their wish to organize a soil-conservation district there and I asked for nominations for president and immediately someone nominated W. P. Lambertson who was there present. He rose and declined the nomination and nominated me. It was seconded and Mr. Lambertson put the nomination before the meeting and I was elected. It was only an account of that little incident that I am here, because I became well known as a soil conservationist and, as such, I attended the meetings in Manhattan and Topeka on the issue of this Tuttle Creek Dam, and I became acquainted in that way with the people of the Blue Valley.

I went out and looked over that situation and I will tell you, gentlemen, I do not think that any Member of Congress could go out there and see that beautiful valley, the way it has been developed, and the amount of livestock and grain and hay that they produce there, greater in proportion to its area than any area in the United States that I have ever visited, and vote to construct Tuttle Creek Dam.

Senator CORDON. Thank you, Congressman.

Representative MILLER. I will have my secretary bring over the statements.

Senator CORDON. Your other statements will be made a part of the record.

(The statements referred to follow:)

STATEMENT OF HOWARD S. MILLER, CONGRESSMAN, FIRST DISTRICT OF KANSAS

There is not a more important question before the American people than that of saving the fertile topsoil which is the source of their living. It is impossible to know the importance of this question without first realizing that the fertile, lifegiving soil has been long ages in forming, that it is very limited in quantity, that it was held upon the land surface only by the protection of growing vegetation, and that vegetation is still its chief and only real protection.

Through the centuries, before man became an agriculturist, there was no danger of a wastage of the soil. It was held fastbound by the vegetation cover. Not until man discovered that he could increase his food supply by stirring the ground with a sharpened stick and planting seeds of fruit and grain, plucked wild from grass and bush and tree, did any net wastage of the soil begin. Up to that time there was from year to year and age to age a net increase upon the earth of fertile, humus-laden soil.

Not even after man began to stir the soil, to kill grass or weeds and make a suitable bed for his seed, was there danger of serious loss. With nothing but man or animal power, and nothing but wooden implements, it was impossible for man, even great numbers of men, to disturb the surface of the earth so as to make possible that the two great erosion agents of nature, wind and rain, should be able to seriously diminish the sum total of life-producing soil. This inability of man, through want of mechanical power and proper implements, to produce food and fiber cheaply and abundantly, made it necessary that the great majority of people should be engaged in agriculture. The population of nations was limited and circumscribed by the number of people who lived upon the land plus the small number that could survive upon the surplus they created. The people who produced the food and clothing had to be fed and clothed first, or there could be no food and fiber, just as the horse that pulled the plow had to be fed alongside of his master, before there could be any plowing done.

The lack of ability to till the soil limited the ravages of wind and rain upon the surface of the earth, limiting man's ability to disturb and endanger it. One hundred and fifty years ago the population of what is now the United States was confined to 4 or 5 million people living on a narrow belt fronting the Atlantic Ocean. At that time, it was believed that the great expanse of fertile soil and the immense forests lying between the Appalachian and the Rocky Mountains constituted a reserve of potential food and fabric for centuries to come. At present the United States is a nation of 165 million people and increasing at the rate of 1,500,000 per year. What has happened that has brought about this unprecedented, this undreamed of, increase in human population? Mainly two things contributed to this situation. First the discovery of cheap processes of producing steel resulting in the invention of the steel moldboard plow which made possible rapid turning over of the soil and consequently the rapid settlement of the West. This movement was greatly accelerated by the invention of the internal-combustion engine which doubled and tripled the speed at which settlement was made. This increase in mechanical power made it possible for 1 man to produce what required a number of men 150 years ago. It made it possible to feed, shelter, and clothe vast numbers of people not engaged in the occupation of producing food and fiber. It made possible our great cities. At the time of adoption of the Constitution, 90 percent of the people were farmers. Now less than 20 percent of the people are engaged in agriculture. This fact makes it all the more necessary that we do not endanger the source of our food supply. How well have we fulfilled that obligation? Let us look at the record. I fear it is a sad picture. The same inventions and implements that made possible the great increase of food production, the same turning of the sod to plant the seed, exposed the soil to ravages of wind and raiu. Through the years every ravine, every creek has been a channel through which our good topsoil has been rapidly carried toward the sea. Year after year this depletion has continued. The farmer has seen the destruction but has been unable to halt the devastation. Experts in our land-grant colleges and in the Department of Agriculture have lectured and written articles calling attention to the dangerous waste, but in vain.

But, you may say, "Why all this anxiety? Have we not left millions of square miles of fertile soil? Do we not have land and to spare? Why worry? At any rate let future generations take care of themselves." I will answer that last assertion first. Future generations can take care of themselves only as we, this and succeeding generations, leave to them the wherewithal to do so. Mankind has not yet found—we believe that mankind may never find—a means of livelihood except from the products of the soil. Man cannot create soil. It should therefore be his greatest care to preserve it. The fertile topsoil is the product of nature's laboratories through countless centuries. The slow chemical action of heat and cold, air and moisture, upon the earth, the erosion of wind and rain, the churning of the waves upon the seashore, the emergence of plant and animal life, all combined through eons of time to produce some 8 or 10 inches of precious soil upon about one-eighth of the earth's surface. An amount so small that it could all be washed into the sea and not make for that hungry maw one good breakfast. Do we realize that the Gulf of Mexico could hold all the fertile soil upon the surface of the United States and still be the Gulf of Mexico? But really, how great is the danger of losing our fertile soil? How serious is the menace? The facts are startling. Over a great expanse of the Middle West, which is the breadbasket of the Nation, already we have lost to water erosion from one-third to one-half of our topsoil. Only the fact that there had been such an abundant accumulation through the milleniums before the white men arrived to break the sod, prevents the present loss from being disastrous. But the loss must not continue for it is

rapidly becoming serious. Already it is being seriously felt. Already we farmers are spending hundreds of millions of dollars annually for commercial fertilizer to produce crops that would be equally large without fertilizer, had we but saved our soil.

And that short sentence brings me to the gist of the question: Why didn't we save our soil? I answer that question in two words: "We couldn't."

Until the last 30 years we had no practical way to till the sod and yet save the soil. That is a plain, blunt statement but it is true.

The discoveries and inventions that made possible the cutting of the forests and breaking of the sod and consequent washing away of the soil did not make it possible to adopt measures to save it. The horse and the mule, the plow and the slip were not suitable power and implements with which to construct terraces, waterways, and detention dams. Their use required too much time. It was too expensive. It was physically impossible. I know, for I tried it. Besides, there were other good and sufficient reasons. During most of the last century and a quarter, when most of our soil loss was sustained, times on the farm were hard. Prices generally were low and on a bare subsistence basis. Usually the farmer was either a renter or in debt for his land. He had interest and taxes to meet. They were fixed charges regardless of the size of his crop or the price of his products. He worked early and late. Conditions compelled him to save. He only half realized the serious loss of his soil. Besides, if the public didn't worry, why should he? If his soil became too thin he would go West. This was an attitude all too common and all too well justified. It was an unhealthful situation. A costly situation to the farmer, to the Nation, and, worst of all, to posterity. Many farmers realized the seriousness of the situation and by rotation of crops, shorter corn rows, and contour farming, did what they could to correct the evil. But it was an uphill struggle and in the end a losing fight. Many agricultural experts in the land-grant colleges and the Department of Agriculture realized the situation and lectured and wrote newspaper and magazine articles depecting the continuing and serious loss. Theirs were as voices in the wilderness for, even though the people heard and believed, there seemed to be no effective remedy.

Along with the loss of soil by erosion there developed another serious evil. The breaking up of the lush grasslands greatly accelerated the speed of the runoff water to the drainage channels, the creeks, and finally to the rivers. It not only ran off with greater speed but consequently carried with it greater amounts of mineral acids, soil particles, clay, and sand. This caused greater and more frequent overflows of ravines, creeks and rivers; cutting deeper the ditches and depositing the silt along the creek banks, thereby clogging the channels, or upon the overflowed lowlands skirting the streams, thereby covering growing crops and sometimes making useless the land for years to come. Valuable bridges and costly buildings and fences were frequently swept away. It was found that the plowed fields and overgrazed pastureland contributed greatly to flood losses.

This was the condition of the great Midwest agricultural region up to less than 25 years ago. To anyone at all conversant with the condition and having regard for the future welfare of the country it was disheartening. But, just at the time when the clouds of despair were darkest, just when there seemed to be no way in which we could till our land and save our soil, there was developed machinery which made it possible to use the well-known methods of terracing, contour farming, grassed waterways, flood-detention dams so quickly and so cheaply that it is now apparent to any thinking person that, by proper cooperation of the individual farmer, the State and National Governments' serious loss of soil can be absolutely prevented.

In 1936 the Congress passed the first Soil Conservation Act, calling upon the various States to pass enabling legislation authorizing the formation of voluntary soil conservation districts to be under the immediate direction of a board of supervisors elected by the farm owners and operators. In furtherance of this program the Federal Government furnished, free of cost to the districts, expert engineering service to survey and lay out the work authorized by the board of directors and agreed to by the landowner. This act was the beginning of the first effective soil conservation program in the United States. Kansas was one of the first States to pass enabling legislation authorized by the act. This was in 1938. At the present time, 102 of the 105 counties in the State have been organized into soil-conservation districts.

In addition to furnishing technical assistance, the Federal Government has provided funds to cover partial expense of certain soil-conservation practices such as terracing, construction of waterways, and detention dams. This Federal assistance has greatly encourage farmers to comply with the requirements of the

soil-conservation authorities and ahs greatly expedited the work which seems, in most cases, to be limited to the amount to which assistance has been granted. There are crosscurrents of thought as to the justice and advisability of the Federal Government furnishing assistance in work done on property belonging solely to a private individual.

Looking at the matter from the standpoint of the Government being the guardian of the welfare of all of the people, not only of the present time but for future ages, any action taken to protect the interest of posterity can be justified as fully as that of making war, building bridges, or any other act by which the Government exercises the right of seizure for public good or of eminent domain for any cause. Any expense therefore that the Government may incur in a program to save the soil can be justified, so long as it redounds to the good of all and not especially to the enrichment of the individual. On this basis the writer can think of no circumstances in which the Federal Government would be more justified in making expenditures calculated to revert to the benefit of all the people than that of expediting, with all possible speed, the program of soil and water conservation and the accompanying benefit of flood prevention.

We are all hoping that the time will not be too far distant when the present world tension will cease and the defense program will be deemed unnecessary. When that time comes thousands of soldiers and defense plant workers will be seeking civil employment.

Is it too much to hope that those young men and many of those giant machines now used in our program of defense, can be put to work in the important undertaking of soil conservation?

Man now has it in his power verily to transform the face of the earth, to make of excess rainfall, formerly an enemy, a most beneficent friend—"to make 2 blades of grass grow where 1 grew before."

We have the machinery. We have the know-how. It is only a question of how best to use them.

Members of the committee, it seems there can be no doubt as to the absolute necessity that immediate steps be taken to conserve our soil.

It is also plain that if this is to be accomplished there must be governmental assistance. Since it is of national concern, it becomes the duty of the National Government to render the assistance.

Without consuming the valuable time of this committee, I will sum up my position in this regard by stating that I have carefully studied H. R. 4877 and fully approve of its provisions. I will state further that I favor H. R. 3376 which provides that, with exceptions therein pointed out, expenses incurred in soil-conservation practices done under direction of the county soil conservation district board, shall be deductible from farm income for income tax purposes.

SUBMITTED BY CONGRESSMAN HOWARD S. MILLER, FIRST DISTRICT, KANSAS

PERFORMANCE OF FLOOD PREVENTION PROGRAM IN OWL CREEK NEAR BARNITZ, OKLA.

The storm of May 19, 1949, on the Cloud Creek watershed near Cordell, Okla., during which 4.6 inches of rainfall occurred, was approximately 4 hours in duration. Watershed conditions were quite dry at the time this rain occurred and the resulting runoff was not greater than 1 inch from the watershed. Since there was little or no water in the detention-structure pools at the time of this rain, all of the runoff was held by the pools below the elevation of the top of the drop inlet risers.

The official gage in Purcell measured 15.55 inches of rainfall from the storm of May 1950 on West Owl Creek; however, unofficial rainfall records collected by the United States Weather Bureau in a study of this storm indicate that the amount of rainfall decreased as the storm moved south from Purcell. An unofficial record shows that 12 inches fell at Paoli, at the south end of the Owl Creek watershed. Since the head of the watershed is approximately midway between Paoli and Purcell, it is probable that the area in which the 4 detention structures are located received 13.0 to 13.5 inches of rainfall during the 36-hour period.

The following information was obtained from an analysis of the functioning of the detention structure at site No. 4:

Since the portion of the pool below the lip of the drop inlet tube (which discharges floodwater automatically) was not full at the time the storm began, the total available detention storage was equal to 5.22 inches of runoff rather than

the designed capacity of 4.5 inches. During the storm the drop-inlet pipe discharged approximately 104 acre-feet of water, which is equivalent to 3.47 inches of runoff from the watershed. Also, during the peak of the storm approximately 53.5 acre-feet, which is equal to 1.78 inches of runoff, flowed through the sodded emergency spillway. The sum of these 3 quantities amounts to 10.47 inches of runoff. If the rainfall on the watershed of structure 4 amounted to 13.5 inches the soil absorbed 3.03 inches.

Water flowed through the emergency spillways of the detention structures at both sites 4 and 5, which are on the east side of the Owl Creek watershed. The structures at sites 1 and 2, which are near the west side of the watershed, filled just to the crest of the emergency spillways. Since these spillways did not function, it must be assumed that the rainfall in this area was not as great as in the east side of the Owl Creek watershed. Structures 1 and 2 discharged 3.47 inches of runoff through the drop-inlet tubes and temporarily stored an average of 5.41 inches of runoff. The calculated rainfall would be the total runoff, 8.88 inches, plus 3.03 inches, or a total of 11.91 inches.

Even though there was a fairly high rate of spillway discharge from structures Nos. 4 and 5 for a short period of time, there was no flooding along the creeks for a distance of almost a mile below the structures. Probably this was largely due to the retarding effect of the detention structures. The peak runoff from the uncontrolled watershed area below the structures probably occurred before the spillway discharge began.

REPORT ON TIGER CREEK

The storm of May 16, 1951, produced 13½ inches of rainfall between the hours of 2 p. m. and 9 p. m. in the Tiger Creek watershed near Clinton, Okla. Tiger Creek has a drainage area of 2,700 acres and is a tributary of West Barnitz Creek. There was no flooding for a considerable distance below the two floodwater-retarding structures and no discharge occurred through the spillways. The fact that there was no spillway discharge from a storm of this magnitude was due to a combination of factors, including the dry condition of the watershed, the fact that over half of the watershed is in grass cover, and that a rather high proportion of the needed conservation measures have been applied.

THE JOHNS HOPKINS UNIVERSITY,
Homewood, May 10, 1953.

Hon. HOWARD S. MILLER,
337 House Office Building,
Washington, D. C.

DEAR SIR: In accordance with your telephone request of May 9, I am recording below the conclusions of the board of consultants on the Kansas River Basin with respect to the Tuttle Creek Dam and other reservoirs on the river. This board, consisting of Messrs. Veatch, Howson, and Wohnan, was appointed in 1952 by Governor Arn of the State of Kansas.

The board recommended that the Tuttle Creek Dam and other similar structures in the Kansas River Basin be deferred for construction, for the following reasons:

(1) They would not accomplish the flood-control purposes currently assumed.

(2) They would flood valuable agricultural lands equal to almost half of the lands to be protected.

(3) Their cost is excessive and very much higher than alternative procedures which would offer equal or greater protection with more assurance of early completion and more accurate guaranty of fulfilling the design purpose.

(4) No integrated plan for the protection of the basin is yet at hand.

(5) No further reservoir impoundments should be built until serious debatable issues have been thoroughly resolved by an independent board of review.

Our board is not alone in these findings. The Missouri Basin Survey Commission, after a completely independent review, states in its report of January 12, 1953, as follows:

"In the face of the slim justification originally formed in 1947, the rising construction costs since that time, and the above indication that half the originally claimed benefits many have since declined instead of increased, the present justification of Tuttle Creek and other similarly situated reservoirs must be seriously questioned. New general plans for flood protection for the Kansas Citys need to be worked out and the flood control benefits of the reservoirs should be realistically appraised before continuing with construction of Tuttle Creek Reservoir."

Very truly yours,

ABEL WOLMAN.

END OUR KANSAS FLOOD PROBLEM

Kansas City now has the record that in the 1903 flood, 260,000 cubic feet per second flowed past Kaw's mouth. Subsequently the 734-foot channel was created to take care of such a flood. In the 1951 flood, 510,000 cubic feet per second flowed past Kaw's mouth.

Old Man River's eternal demand is, "Leave for me, or create for me, sufficient channel for all my need, or I will take it when I want it." Kansas City did neither, the Kaw River took it July 13, 1951.

Resolving that into a simple, easily visualized illustration we can correctly say that in 1951 Kansas City had a 1-quart (260,000 cubic foot) channel, and a 2-quart (510,000 cubic foot) flood. (1.961 quart to be exact to the third decimal.) What happened? Simply, the second quart went through the dikes of the 1-quart channel and flooded Kansas City. What shall be done to flow the 2 quarts safely past Kansas City? Dam up the second quart? That offers no answer for no one knows for certain where to locate the dams. What is the answer? The simple infallible answer is to create a 2-quart channel.

What do we do when the volume of traffic exceeds the capacity of a street or highway? Do we build barricades on the feeder roads, lanes, or streets? Certainly not. We build 4-lane highways—superhighways, trafficways, bypasses, optional routes, etc. When this is done we have sufficient street or highway capacity for the maximum volume of traffic to flow safely to and from our homes, farms, and industries.

The quantitative fact of a vehicle or a quart of water is identical. That is one of the absolutes of our universe. Two cars cannot be put into the space of one car nor can 2 quarts of water be put into the space of 1 quart.

A few days after Black Friday, a member of the Flood Safety Association addressed a number of officials and citizens suggesting creation of auxiliary channels for the Kaw during reconstruction of the disaster areas.

Our association was organized December 12, 1951, and in June 1952 issued our pamphlet proposing:

> The creation of sufficient channel capacity to carry the maximum known flood volume and maintenance of these channels at full efficiency to provide safety from floods for our cities and farms.

The Flood Safety Association now counts it a privilege to endorse in principle, Governor Arn's committee of engineers which they recite in their findings, that flowways of sufficient capacity are the solution of Kansas problem of floods.

Big dams, unrestricted as to type, are proposed as the solution. Consider the performance of a few:

Kanopolis Dam was built. In 1951, Salina was flooded. Was Kanopolis full or did the rain fall below the dam? Fact is Salina was flooded.

Bonneville Dam was built on the Columbia. Later Vanport, a suburb of Portland was flooded, 40 died, 60,000 were homeless, $200 million damage. Did rain fall above, below, or was Bonneville full? Fact is Bonneville did not save Vanport.

Pensacola Dam in Oklahoma has overflowed three times between 1943 and 1951. What happened? Simply it rained in the wrong place or wrong amount for the dam to protect the valley below.

Tennessee Valley has a series of dams yet the TVA and Army engineers say Chattanooga must have flood-control work. Apparently they know the dams will not stand the big test there.

Fort Peck Dam and others are located up the Missouri Valley. April 1952 the big Missouri came flooding down the valley from thawing snow, rain, etc. Where was Fort Peck, etc.—above, below, full, not complete? Do you know? I don't. However, there is one fact you and I are certain of—the Missouri flooded despite Fort Peck, etc., and at Omaha men frantically built a 5-foot wall on top of the existing dike to create a larger flow way, emergency channel, auxiliary channel—call it what you wish—it created a channel of sufficient capacity to carry the flood past Omaha and Council Bluffs safely. The same frantic building was begun at Kansas City, but the big Missouri feathered out so it only flooded Riverside district.

The record stands that big dams (except retarder dams) do not provide the answer for flood safety. There is always some unforeseen situation when the big test comes. Either they are not at the place they are needed or they are too full to contain the flood or rainfalls below or something else. Guessing that we can outwit a deluge with a dam is not sustained by the performance of dams.

Dayton is safe since 1913 because she built a sufficient number of retarder dams upstream.

New Orleans is safe since she built the Bonnet Carre' spillway (an auxiliary channel or auxiliary flow way). It diverted the floods of 1937–45 and 1950 into Lake Ponchartrain.

Realistic thinking raises another question. What shall be done to anticipate a greater deluge than July 1951? To be thorough that question should be also faced now.

Irrigation, reservoir and power dams offer nothing. They cannot for they must at all times be kept as full as possible against the possible hazard of a drought period.

The realistic solution to that phase of the flood problem is to design the defense against operation flood disaster to automatically launch the campaign of attrition at the grassroots level at the same moment the first drop of rain falls with programs and operations that automatically retard runoff at the point rain falls, such as, terraces, forestation, grassing, small pools and other insoak systems high and low throughout the watershed; and then meet the organized raindrops at the streams in the valleys with dry reservoirs above retarder dams to meter the floods to the capacity of the channels below.

Universally we know that men do not break nature's laws—nature's laws break men. In 1951 nature's water laws broke many homes, farms and industries, took some lives and brought suffering to many people. End all that by admitting and working with the simple fact that through countless ages nature's law has taken channels sufficient to contain the water flowing to the sea and cities and farms will be safe from floods only when we leave, or create for, Old Man River sufficient channel capacity for all his need.

Leave the guess out of flood control efforts by copying the pattern nature's laws prescribe and live, work, and build in safety in our valleys.

THE FLOOD SAFETY ASSOCIATION,
Kansas City, Kans.

Senator CORDON. The committee will recess now until 2 o'clock.

(Whereupon, at 12:30 p. m., the committee recessed, to reconvene at 2 p. m., same day.)

AFTERNOON SESSION

Senator CORDON (presiding). The committee will come to order.

The committee has the pleasure of having this afternoon Senator Myers, formerly a distinguished member of the Senate, and we are happy to hear from you, Senator.

GREATER PHILADELPHIA CHAMBER OF COMMERCE—SOUTH JERSEY DELAWARE COUNCIL

STATEMENT OF HON. FRANCIS J. MYERS, GENERAL COUNSEL

PENNSYLVANIA FLOOD CONTROL AND RIVER AND HARBOR PROJECTS

Mr. MYERS. Mr. Chairman, I have always had a great interest in the flood control and river and harbor projects in Pennsylvania, and particularly in the Schuylkill River project, which is in my own home town.

I appear before you as general counsel to the Chamber of Commerce of Greater Philadelphia and for the Greater Philadelphia South Jersey Delaware Council, which is a joint organization, and part of the Chamber of Commerce of Philadelphia.

By Act No. 441 of June 1945, the General Assembly of the Commonwealth of Pennsylvania established what is known as the Schuylkill River desilting project. It provided for the removal and disposal of the silt deposits which had accumulated in the channel of the Schuylkill and on the banks of the river from its headwaters to Norristown Dam, and for the prevention of future accumulations. The Common-

wealth in addition to its work above Norristown has also agreed to provide the Federal Government with the land and easement necessary for the disposal of the dredge material below Norristown. The Schuylkill River project was approved to its juncture with the Delaware River by the 79th Congress, 2d session, July 1946. The Schuylkill River cleanup there is a joint undertaking of the Commonwealth of Pennsylvania and the Federal Government, estimated to cost $35 million. Approximately two-thirds of this cost is to be borne by the Commonwealth of Pennsylvania and one-third by the Federal Government.

On August 27, 1951, the Schuylkill River project engineers submitted their final report on the restoration of the Schuylkill River which included Pennsylvania's share of the cleanup work from the headwaters to the dam at Norristown, Pa., which share of the project was completed in good faith by the Commonwealth of Pennsylvania at a total cost of over $20 million.

The remainder of the work from Norristown Dam to the south of the Schuylkill is the responsibility of the Federal Government. This work includes the removal of culm from the Plymouth, Flat Rock, and Fairmount Pools.

I might say, therefore, that this project was begun during Governor Martin's administration, now Senator Martin, and the Commonwealth of Pennsylvania carried its work to completion during the governorship of Governor Duff, now Senator Duff.

DREDGING OPERATIONS

The district engineer, United States Army, Philadelphia, has recently completed the dredging of culm from the Plymouth and Flat Rock Pools and will award within the next 2 weeks a contract to initiate work in the Fairmount Pool.

The Federal Government has thus far appropriated approximately $3 million. In order to insure progression of work in Fairmount Pool without interruption it will be necessary that funds be provided in the 1953–54 budget in the amount of $500,000.

The cleanup of the Fairmount Pool will improve the water supply problem of the city of Philadelphia, offer improved recreation facilities, mitigate flood hazards and reduce dredging costs in the much-used Federal channel below Fairmount Dam.

If additional funds are not forthcoming the proposed contract to dredge Fairmount Dam will have to be terminated before the end of the next fiscal year, delaying the completion of the project. This lack of continuity would be expensive, wasteful, and show a lack of appreciation on the part of the Federal Government to complete this project at an early date. Early completion of the project is highly desirable as attested by the fact that the State has already fulfilled its share of the contract to the extent of some $20 million.

The advantages of a complete cleanup of the Schuylkill are many and will not therefore be enumerated here. The Army engineers have made this abundantly clear, I am sure.

AMOUNT REQUESTED

On behalf of the Greater Philadelphia-Delaware-South Jersey Council, a bureau of the Chamber of Commerce of Greater Philadelphia and the surrounding counties in the Philadelphia metropolitan area, I urgently request that $500,000 be provided in the budget in fiscal year 1953-54 to continue this worthwhile project.

I am confident, too, that the Senators from Pennsylvania, New Jersey, and Delaware share my views with regard to this request.

Senator CORDON. Thank you very much, Senator.

Mr. MYERS. Thank you, sir.

Senator CORDON. As you indicated, the Corps of Engineers has presented the item and testimony on the subject, and I think there is a full picture before the committee.

Mr. MYERS. Thank you, sir.

Senator CORDON. The committee is most appreciative of your coming down and presenting the cause of your client and your own cause, as the committee knows it to be.

Mr. MYERS. I might say that I present the cause of my client just as general counsel of the chamber of commerce, which is a nonpaying position, it is just a civic contribution to the whole metropolitan area of Philadelphia.

Senator CORDON. The committee will now stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 2:10 p. m., Wednesday, May 20, 1953, the committee recessed to reconvene at 10 a. m., Thursday, May 21, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS FOR 1954

THURSDAY, MAY 21, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in room F–39, the Capitol, Senator William F. Knowland, chairman of the subcommittee, presiding.

Present: Senators Knowland, Young, Mundt, Dworshak, Ellender, and Robertson.

CIVIL FUNCTIONS

OKLAHOMA CITY FLOOD CONTROL PROGRAM

STATEMENT OF N. R. GRAHAM, VICE CHAIRMAN, OKLAHOMA PLANNING AND RESOURCES BOARD

BANK STABILIZATION

Senator KNOWLAND. The meeting will come to order.

The first witness is Mr. N. R. Graham.

Mr. GRAHAM. Good morning, Senator Knowland. My name is N. R. Graham. I am vice chairman of the Oklahoma Planning and Resources Board, which board has charge of development of our land and water resources of the State. It represents the State government in that manner.

In a brief way, sir, I would like to endorse the program of bank stabilization that is in the budget as it is now, in the matter of $4,800,000 for the States of Arkansas and Oklahoma.

I would like to request, if possible, an increase in the proposal for expenditures for the Oklahoma City flood-control program, from $1,800,000 back to the $3,200,000 first appropriated, for the reason that that is the economic schedule for those matters.

LACK OF STORAGE FACILITIES

I would like to, if I might, call the attention of the committee to the fact that in the 160,500 square miles of the Arkansas River Basin, composing 12.8 percent of the whole Mississippi Valley, there is not one reservoir under construction at the present time. For some reason, over the last few years, they have been closing down the reservoid program in this basin. And this is a dangerous situation for

two important reasons. One is the drift of our people, the thinking of our people, away from this river program, and to a soil-conservation program. Now, we are for soil conservation for upstream soil protection, but we well know that in the lower Arkansas River, where there is a million acres and more of the finest type of bottom land, soil-conservation dams will not protect us from floods like we have had in 1927 and 1941 and 1943.

The Arkansas River is composed of six major rivers. The shortest of these tributaries is 400 miles of territory. Altogether, the river will exceed 5,000 miles in river mileage, in the main river and its tributaries.

1943 FLOOD

In 1943, at the Arkansas-Oklahoma line, these 6 rivers, which got the flood which went over the basin, had a crest in excess of 800,000 second-feet, a total passage in excess of 5 million acre-feet—in excess of the great Columbia flood that flooded Portland, in excess of the Kaw River flood of 1951, so far as the crest and the volume of water was concerned.

And so it disturbed us, gentlemen, to find that we are closing down this river program in this great basin.

We know that it can't be started this year. We look at life as it is. But we are then badly disturbed by the fact that planning funds have been rather curtailed, too. We see ourselves drifting further and further into the background. And in the meantime the committee is voting millions of dollars for levees and bank stabilization downstream. We are for that, because it will protect us from a bad situation during minor floods. But, gentlemen, a 1943-type flood will top these levees, and will wipe out these bank-stabilization things that we are paying for. So unless we do keep apace of some kind of construction above that area, where these 6 streams come together with these 60 river-miles—people don't realize that there are 6 major streams. One is 500 miles long. Another is 400. The main stem runs to the mountains of Colorado, and it is over a thousand. The Cimarron River of song and story is around a thousand miles in length. And the two Canadians rise in Mexico, go across Texas into Oklahoma, and within a space of 60 river-miles, 6 major streams come together. I don't believe there is any other place in the United States where that many streams of major proportion come together. So you have a place that can explode into major disaster. And it disturbs us when our planning funds and our construction funds are not going forward in an orderly way.

PLANNING MONEY REQUESTED

We realize the world situation. We are willing to observe that. And I am for all parts of the country and their needs. But last year we saw a concentration of these funds to the extent of over 50 percent in the Columbia and Missouri Basin, and we see it again this year. So we at least want our planning money, because we know that some day, if we don't keep going ahead, another disaster will strike.

In 1943 we lost 23 people and millions and millions of dollars in property. We don't want to do it again if we can afford it.

Thank you, gentlemen.

Senator KNOWLAND. Thank you very much.
The next witness is Mayor Lyman Beard.

FORT GIBSON DAM

CITY OF MUSKOGEE, OKLA.

STATEMENT OF LYMAN B. BEARD, MAYOR

GENERAL STATEMENT

Mr. BEARD. Senator Knowland and Senator Ellender, I have already filed the original copy of this statement.

Senator KNOWLAND. I might say that your statement will be printed in full in the record, and if you care to extemporize on your remarks, your full statement may go in the record.

Mr. BEARD. I appreciate that, Senator. If there are any questions you would like to ask us as I proceed, we would be happy to stop and answer them.

Mr. Chairman and gentlemen of the committee, I am Mayor Lyman B. Beard, of the city of Muskogee, Okla. In behalf of the city, I hereby submit a factual statement of the position of the city with reference to its application for an appropriation and specific directive to the Corps of Engineers for the construction of a waterflow line from the Fort Gibson Dam at Fort Gibson, Okla., to the city's water intake, which is located in the Grand River approximately 6 miles below the Fort Gibson Dam, or as stated in the Senate Appropriations Committee report on the Army civil functions appropriations bill of 1950, that the Corps of Engineers move the city's intake upstream to connect with the reservoir formed by the Fort Gibson Dam.

This statement is a recapitulation of the facts taken from the files of the city of Muskogee. These files have their origin commencing with a resolution adopted by the City Council of Muskogee on the 8th day of December 1941, and continuing until this present date. The contents of this statement will set out undisputed facts and evidence, in the city's opinion, that the following issues should be resolved by this committee in favor of the city's position, as follows:

ISSUES TO BE RESOLVED

I. That the domestic water supply of the city of Muskogee should be protected by moving their water intake on the Grand River upstream to the Fort Gibson Dam.

II. That it is the responsibility of the Corps of Engineers to construct a waterflow line from the city's intake on the Grand River to the new intake provided in the Fort Gibson Dam.

III. That the Fort Gibson flood-control project in Oklahoma is not to be considered complete until a waterflow line is constructed, and that the same is, and always has been, considered a part of said project.

IV. That the waterflow line should be 48 inches in diameter, or a line of sufficient capacity, to replace in kind the city's intake capacity which existed prior to the construction of the Fort Gibson Dam.

V. That the Corps of Engineers be directed to use any current surplus funds that exist in the Tulsa district of the Corps of Engineers toward the commencement of the flow line forthwith, and that due consideration be given for an appropriation for the coming fiscal year for the continuation of the project until completion.

PRIOR SENATE COMMITTEE REPORTS

First, the report of the Senate Committee on Appropriations, both in 1947 and in 1950, recognized the adverse effect of the Fort Gibson Dam on the water supply of the city of Muskogee. This committee report carried language to the effect that the backwater from the Arkansas River, which is very high in mineral content, was an ever present threat to the city's water supply and that the Government should move the city's intake upstream to connect with the Fort Gibson Dam. Studies of the situation that would be created on the Grand River, after construction of the dam, were made during the year of 1941 by the city of Muskogee. After the report was received, the City Council of the city of Muskogee adopted a resolution during regular session on the 8th day of December 1941, pointing out the adverse effect on the city's water supply and making application for a flow line through the Tulsa district office of the Corps of Engineers. A copy of this resolution is now offered by the city as exhibit A to be made a part of the record.

SOURCE OF CITY WATER

The city of Muskogee has always taken its supply of raw water from the Grand River. Beginning in the year 1902, or 5 years before statehood, the supply of water was provided for the city through two 12-inch cast-iron pipes from the Grand River to the pump station located on the south bank of the Arkansas River. In less than 10 years the capacity of those two lines became inadequate for the growing city. In 1911, the citizens of the city voted a municipal bond issue for substantial funds to construct a 54-inch concrete line tunnel from the Grand River to the pump station. This tunnel was connected to an intake tower located in the Grand River about 1,000 feet upstream from its confluence with the Arkansas River and has furnished the city with an abundance of raw water until the construction of the Fort Gibson Dam. In view of the expense involved in constructing the intake tower and tunnel, the anticipated future requirements of the city were no more than a reasonable consideration, and the size and capacity of this intake and tunnel were determined with such future requirements in mind. The city had already passed through the experience of being too conservative in its provision of a water supply as already related earlier herein, and for that reason the 54-inch tunnel was constructed which would provide a daily capacity of approximately 40 million gallons.

Second, when the city of Muskogee learned that the Corps of Engineers were authorized to construct the Fort Gibson Dam and the city adopted the resolution herein referred to in December 1941, there followed a great deal of correspondence, personal conference and legislation from Congress, all of which during the past 13 years has given the city every reasonable right to believe that the Corps

of Engineers had recognized its responsibility to construct the water-flow line and that the outlet in the structure of the dam was installed for that specific purpose.

PLAN OF CORPS OF ENGINEERS

As early as June 11, 1943, a letter was written by Leo H. Towers, major, Corps of Engineers, executive assistant, Tulsa district office, to Mr. N. R. Graham, chairman of the Southwest Valley Association, in which it was stated that the plans of the Corps of Engineers provided for the taking of water from the reservoir to be formed by the Fort Gibson Dam through a 48-inch cast-iron pipe; this letter went on to state in addition that it may be necessary to lower the outlet in the dam if the design for flood control of the dam was modified to incorporate power generating purposes, and that the city could elect to take water from the reservoir before the project was completed, but in any event, the letter stated, the present water supply of the city would not be interfered with by the ultimate purposes of the projects. A copy of this letter from Major Towers is now offered by the city as its exhibit B to be made a part of the record.

In the acceptance of its responsibility as the agency of the Federal Government directly affected to make adequate provisions for the protection of the city's water supply there was included in the plans and specifications for the Fort Gibson Dam provision for the flow-line connections with the outlet therein constructed as a part of the dam.

NEGOTIATION

During all of the passage of the time from the outset of this project, the negotiations proceeded on a plane of understanding and consideration by the Corps of Engineers.

To point out the deep regard of the Army engineers and the specific plans and communications given the city by them in this matter, a letter was written on July 28, 1943, by Thomas M. Robins, major general, Acting Chief of Engineers, Washington, D. C., to the Hon. Elmer Thomas, United States Senator, from Oklahoma, in which it was stated that the design of the multiple-purpose project of the Fort Gibson Dam provided for a 48-inch outlet of cast-iron pipe with necessary controls so that the water-supply outlet for the city would be adequate, regardless of the uses of the dam for flood control or power, and so that the release of water could be constant, whether the turbines are in operation or not in operation.

This letter indicated that the water supply should not be affected, in the engineer's opinion, if the dam were used for flood control only; but that in the event of power purposes the matter would need further consideration in the light of operating schedules of the powerplan.

Every assurance was given in this letter that the needs and protection of the city's water supply was being given full consideration. A copy of this letter is being offered at this time by the city as its exhibit C, to be made a part of the record.

AMENDMENT TO 1947 BILL

For the purpose of securing to the Corps of Engineers specific authority to cooperate with the city of Muskogee, the civil functions appropriations bill of 1947 was passed and carried an amendment, as follows:

Provided further, That in the construction of the Fort Gibson flood control project of Oklahoma, the Chief of Engineers is authorized and directed to cooperate with the officials of the city of Muskogee in protecting the domestic water supply of such city.

The Corps of Engineers refused to acknowledge that this was a mandatory direction to them, or that they had sufficient authority under the quoted provision to construct the flowline at Government expense.

They contended further that Congress had failed to make an additional increase in the appropriation in the 1947 appropriation bill for the civil functions of the War Department to cover the costs of such construction.

ESTIMATED COST

Senator KNOWLAND. What is the estimated cost of construction?

Mr. BEARD. Approximately a million and a half dollars, Senator.

The city of Muskogee was advised of this attitude of the engineers in a personal conference with Mr. G. L. Beard, of the Office of the Chief of Engineers in March 1949. This gentleman stated further, however, that the engineers would prefer that no additional amendment or legislation be written giving specific direction for the construction of the flowline, purely as a matter of protection to them against precedent, but stated that the Corps of Engineers would carry out the construction should the Senate Civil Functions Committee report disclose that the committee recommended the construction of the flowline and an additional appropriation be included.

COMMITTEE REPORT

Subsequently, therefore, in the committee report on the civil-functions appropriation bill of 1950, this language appeared, which was the language agreed upon by Mr. G. L. Beard, officials of the city, and the Oklahoma congressional delegation, and which language was designed to satisfy the Corps of Engineers, and bring about prompt action toward construction of the flowline, and which language had not appeared in the prior reports, as follows:

For this reason, the Government should move the intake upstream to connect with the reservoir to be formed by the Fort Gibson Dam.

The report stated further:

Thus it is the committee's opinion in connection with the appropriation for the Fort Gibson Reservoir, Okla., as well as appropriations for other authorized projects, that such appropriations are available for purposes appropriate to carrying out the project as authorized by the Congress.

CONSTRUCTION OF FLOWLINE

It had been explained to the officials of the city of Muskogee and the Oklahoma congressional delegation that this would be accepted by

the Office of the Chief of Engineers as a directive from Congress to proceed with the construction of the flowline.

It was explained to the city officials by the Oklahoma delegation that any appropriation made for the Fort Gibson Dam project could thereby be used for the construction of the flowline.

It was pointed out that the Congress did not specifically break the general appropriation down to the various items to be included in any project, but rather left it to the discretion of the Corps of Engineers to prosecute the various features in the order of their relationship to the project as a whole.

LANGUAGE OF COMMITTEE REPORT

In order that there shall be available to this committee the full language of the committee's report with reference to this project when the army civil-functions appropriation bill of 1950 was passed, the language is set out as follows verbatim, and can be found by this committee as report No. 361, submitted by Senator McKellar, from the Committee on Appropriations, to acompany H. R. 3734, making appropriations for the fiscal year ending June 30, 1950:

The Civil Functions Appropriation Act has in 2 previous years carried language to the effect that in the construction of the Fort Gibson flood-control project in Oklahoma the Chief of Engineers is authorized and directed to cooperate with the officials of the city of Muskogee in protecting the domestic water supply of such city. The committee has not deemed it necessary to repeat this language in the bill for the fiscal year 1950 but is of the same opinion that the Chief of Engineers should continue to cooperate with the officials of the city of Muskogee in protecting the domestic water supply of the city. The committee was advised that the Fort Gibson Dam will adversely affect the operation of the city of Muskogee's water intake on the Grand River, because of backwater from the Arkansas River, which is very high in mineral content. For this reason, the Government should move the intake upstream to connect with the reservoir to be formed by the Fort Gibson Dam.

The committee was advised that in accordance with existing law it is the policy of the Corps of Engineers to acquire properties which are needed for authorized flood-control reservoir projects. Funds for the acquisition program, including relocations determined to be necessary, are included in the general appropriations made by Congress for the construction of flood-control projects. Thus, it is the committee's opinion in connection with the appropriations for the Fort Gibson Reservoir, Okla., as well as appropriations for other authorized projects, that such appropriations are available for purposes appropriate to carrying out the project as authorized by the Congress.

ATTITUDE OF CORPS OF ENGINEERS

Senator KNOWLAND. What is the difference? Does the Corps of Engineers feel that the water supply is not jeopardized, or that they were authorized and directed to cooperate with the city but not necessarily to assume the entire burden? Or is it that they feel the city itself should pay for the cost of this?

Mr. BEARD. Senator, that will be answered further in my statement. However, it is material at this time that that question be answered.

The district engineer in the Tulsa district office has advised us—and when I say "us" I mean the city officials of Muskogee—in a conference in March of 1950, as well as in October of 1952, that the Corps of Engineers has approved the plans, specifications, and so forth—I am not an engineer but an attorney; but I have an engineer with me that will explain some of these things if it becomes necessary—that they have

approved the details, and all, for a 36-inch flowline, and that the reason it has not been constructed is because of lack of funds.

I might say in this connection, since you have asked, as you will find later in this statement, that we feel, to replace in kind our water capacity as it was before the dam was built, we should have a 48-inch line. The engineers have approved plans, and so on, for 36. There is a difference of opinion. That is not the material consideration of our problem. The material consideration is that we have watched this dam and its construction over a period of 13 years. Two Senate committee reports have asked, in language that was agreed upon, that this flowline be built. And, as you will find in this report later, the dam will be dedicated, Senator, in about 2 weeks from today, June 6. The line hasn't been mentioned, and nothing has been done that we know of other than the plans.

WATER SHORTAGE

Last summer we had a drought. We had to use bulldozers in the middle of the night, sometimes through the day, to keep the trickle of water coming down the Grand River, coming to our intake, by cutting sand bars away—which I want to show you photographs of. We feel we are in prompt and desperate need of immediate relief.

Does that answer the Senator's question?

Senator KNOWLAND. Yes.

CONGRESSIONAL DIRECTION

Mr. BEARD. Thus, from the statements made to this point in our presentation, it can be observed that the Congress directed the Corps of Engineers to cooperate with the city of Muskogee in protecting the water supply of said city; that they move the intake upstream to connect with the Fort Gibson Dam, and that such project included this flowline as an integral part of the project, and that same was not completed until this was done as directed by Congress. Yet, the Fort Gibson Dam has been completed for flood-control purposes for 2 years, and the first powerswitch for production of power from the turbines of the Gort Gibson Dam was thrown over a month ago, and the Fort Gibson Dam is to be dedicated in a formal program in Oklahoma on June 6, 1953, or in about 2 weeks from today.

From the planning stages to this near date for the formal dedication of the Fort Gibson Dam, the city of Muskogee has been assured that the construction of the flowline would be done by the time the Fort Gibson Dam was placed in operation.

I would like to read to this committee a letter written on June 16, 1950, by Louis L. De Noya, major, Corps of Engineers, Executive Office, for the district engineer at Tulsa, Okla., to the city manager of the city of Muskogee, as follows:

CORPS OF ENGINEERS,
U. S. ARMY OFFICE OF THE DISTRICT ENGINEER,
TULSA DISTRICT AIRCRAFT ASSEMBLY PLANT NO. 3,
Tulsa, Okla., June 16, 1950.

Mr. R. L. DAVIS,
City Manager, Muskogee, Okla.

DEAR MR. DAVIS: Reference is made to your letter of June 2, 1950, in which your request detailed information relative to present status of plans for the proposed flowline from the Fort Gibson Dam to the Muskogee Waterworks.

Surveys of alternate routes for the proposed flowline have been completed. Preliminary plans and engineering studies of alternate locations and of alternate nolutions of certain design features are under way, but are not far enough advanced so that these plans can be discussed with your office at this time. These alternate studies include investigations of the desirability of terminating the flowlines at the Muskogee Waterworks plants or at your present intake.

As soon as design features of the proposed flowlines have been worked out, this office will get in touch with you to discuss the proposed location and other features of the flowline. It is anticipated that the preliminary studies will be completed about July 15, 1950.

You may be assured that this matter will receive continued atention in order that the work may be completed by the time the Fort Gibson Dam is placed in operation.

Very truly yours,

/s/ Louis L. De Noya
LOUIS L. DE NOYA,
Major, CE Executive Office
(For the District Engineer).

GOVERNMENT DECLARATION

A copy of this letter is being offered at this time by the city as its exhibit D, to be made a part of the record.

This letter has been detailed to this committee for the purpose of showing the Government's declaration that the Fort Gibson Dam would not be considered a completed project until the flow line was constructed, and also as evidence that plans were in preparation for the flow line as early as 1950. This position was recently confirmed at a hearing in Tulsa, Okla., on October 28, 1952, in the office of the district engineer, when Col. E. G. Herb declared to the officials of the city of Muskogee that the Fort Gibson Dam would not be considered a completed project until the flow line was built.

If the city of Muskogee had been of the impression, or had the belief, that the flow line would not be constructed, it would have opposed the plans and construction of the dam; this is evidenced by a resolution adopted by the city council of the city of Muskogee on May 22, 1944, when the city sent said resolution to the district engineer at Tulsa, Okla., as well as to the Oklahoma congressional delegation, which provided that the city protested the current plans that did not include a flow line from the dam for the water supply of said.

A copy of this resolution is now offered as the city's exhibit E, to be made a part of the record.

FLOW LINE CONSIDERED PART OF PROJECT

Subsequent to adoption of this resolution, the city had reason to believe that the flow line was to be constructed and completed as a part of the project, as already set out in this statement.

The city does not understand why the Corps of Engineers has not commenced construction of the flow line. We feel that the acts of Congress have been clear and well defined in this respect.

The Corps of Engineers has stated that their activities are conducted in strict accordance with authority from Congress, yet, in this instance, the directives of Congress have not been fulfilled.

The intent of the reports of the Senate Committee on Appropriations, already referred to herein and quoted verbatim, could hardly

be misunderstood; it was their intention that this flow line be constructed, and through Mr. G. L. Beard, of the Chief of Engineers' Office, the exact language of the reports were agreed upon to provide the result they intended.

LETTER OF SENATOR THOMAS

The Honorable Elmer Thomas, United States Senator from Oklahoma at that time, who was then a member of the Senate Appropriations Committee, had written many letters to the city of Muskogee defining the actions of Congress and his committee, and in particular his communication of November 22, 1948, to the mayor of the city of Muskogee confirmed these conclusions, and a copy of this communication from Senator Thomas is presented as the city's exhibit F, to be made a part of the record, showing the intent almost 5 years ago of the members of the committee in the language of their report.

LETTER OF SENATOR KERR

Also, in further support of the intention of Congress and the understanding had with the Chief of Engineers' Office, I would like to offer as the city's exhibit G, to be made a part of the record, a letter of May 14, 1949, from Senator Robert S. Kerr, in which it is stated that Senator Elmer Thomas' committee report covered the flow-line matter in the proper way and in accordance with the agreement Senator Kerr and other city officials had with Mr. G. L. Beard, of the Chief of Engineers' Office.

Fourth, the following facts are offered for consideration in the determination of the Government's responsibility as to size of line to be constructed:

As previously explained, the city's intake and tunnel have a daily capacity of 40 million gallons. Though this is substantially in excess of the city's current needs, it was built in 1912 with the city's future growth in mind. The growth of the city in the 40 years since its completion has justified the faith and foresight of the then city planners.

RECONSTRUCTION AND ENLARGEMENT OF WATER PLANT

In 1945, reconstruction and enlargement of the city's water plant became necessary. At that time, a firm of consulting engineers was employed to study the city's needs and make recommendations for the necessary expansion. This firm was also asked to investigate the effects of the Fort Gibson Dam upon the city's water supply and to offer their recommendations. Their findings confirmed those of earlier engineering studies and their recommendations included a 48-inch diameter flow line. These recommendations were given in person in Washington by a representative of the engineering firm in early 1946.

The various other capacities of the filtration plant and pumping system are correspondingly less, but have been enlarged as needed and may continue to be enlarged as needs demand. The city feels, however, that the main consideration should be the city's current potential supply—that of the intake and tunnel. The city feels further that inasmuch as the present intake makes adequate provision for the city's

future water supply needs that it is only fair to request a flow line of adequate rise to provide for reasonable expansion of the city's needs.

Fifth: The Corps of Engineers have plans and specifications approved by the Office of the Chief of Engineers for a 36-inch flow line——

Senator KNOWLAND. What is the difference in cost between a 36- and a 48-inch flow line?

Mr. BEARD. Senator, if you will pardon me, I will ask the city manager.

Mr. HARELL (Clay Harell, Muskogee city manager). Approximately a half million dollars.

Senator ELLENDER. What did the engineers first agree to build? Was it a 36-inch?

Mr. BEARD. Senator, there has never been any discussion between the city of Muskogee and the Corps of Engineers with respect to size, until last fall, when we were first informed by Col. E. G. Herb of Tulsa.

Senator ELLENDER. You said you objected to the building of the dam in 1944 or 1945, or whenever it was.

EFFECT OF DAM ON WATER SUPPLY

Mr. BEARD. This dam commenced in 1941, Senator. In 1944, we learned that there was not—I am going to use terminology of a layman—a hole or outlet put in the dam for the purpose of connecting our water supply.

Senator ELLENDER. Did the building of this dam entirely cut your water supply?

Mr. BEARD. When used as a flood-control project, holding back water, it cuts off, of course, the flow of the river.

Senator ELLENDER. Entirely?

Mr. BEARD. Last summer there have been times when the water has been entirely cut off, for one reason or another, all the water. There have been some 13 drownings below that dam since its construction. When they search for bodies, of course, it is entirely cut off.

Senator ELLENDER. How much has the city grown in population since 1941?

Mr. BEARD. I am not exactly correct in this, but I would say approximately 8,000 since 1941.

Senator ELLENDER. Is that the reason for an increase in the size of the pipe?

Mr. BEARD. Yes, sir.

Senator ELLENDER. Why should you not pay some of that increase?

Mr. BEAD. Sir?

Senator ELLENDER. Why should not the city pay for some of these increased costs?

Mr. BEARD. The difference in cost between 1936 and 1946?

Senator ELLENDER. Yes.

Mr. BEARD. We are willing to sit down with the engineers and discuss those things; yes, sir.

Senator KNOWLAND. All right. You may proceed.

Mr. BEARD. The city feels, however, that the main consideration should be the city's current potential supply—that of the intake and

tunnel. The city feels further that inasmuch as the present intake makes adequate provision for the city's future water supply needs that it is only fair to request a flow line of adequate size to provide for reasonable expansion of the city's needs.

PLANS AND SPECIFICATIONS

The Corps of Engineers have plans and specifications approved by the Office of the Chief of Engineers for a 36-inch flow line, however they have not offered to build this line; on March 30, 1951, and on October 28, 1952, Col. E. G. Herb, district engineer in Tulsa, Okla., met with the city officials of the city of Muskogee and stated such plans were approved for a 36-inch line, but that there were no funds appropriated for the construction of the line.

As already pointed out, we do not feel that Congress must specifically intemize an appropriation for this flow line, and the intention of the Committee on Appropriations did not so intend, as already explained by the letter from Senator Thomas and made the city's exhibit F, that any funds appropriated for the Fort Gibson Dam project could be used to carry out the construction of the flow line.

Through the city does not currently feel that this line will be adequate, it is felt that these details can perhaps be ironed out once the problem of availability of funds is solved. Hence, the city is requesting that any current surplus in the Tulsa district of the Corps of Engineers be used for initiating construction on the project and that additional funds be provided by Congress from year to year until the project is complete.

INDICATION OF REPORTS

Senator KNOWLAND. Of course, the Chair would say that, based on the facts that have been presented here to date, the language in the two reports, while authorizing and directing the engineers to cooperate with the city, does not, in and of itself, indicate that the Congress was expecting the engineers, representing the Federal Government, to assume the full cost, or any of the cost, for that matter, of a 48-inch line.

I think it does indicate that they should cooperate with the city in mutually trying to work out the problem, but I do not think there should be read into the report any commitment on the part of the Federal Government to assume the total cost of it.

Mr. BEARD. Senator, our understanding of the committee's report was that when they stated that the intake should be moved upstream from its location in the river to the dam indicated, the line should be built.

Now, I might say this. The city is ready and willing to spend its money to assist in the building of this line. We are willing and ready to pay the difference in cost between a 36-inch and a 48-inch. There are many other details that must be worked out in a project of this kind. We are willing to sit down and work out those things.

But we have not been asked to do so or invited to do so.

REQUEST FOR NEGOTIATION

We would like to do so. We would like to have the engineers feel that they have authority to work these things out with us, and authority to use the surplus that we feel they have in that district. This fiscal year they have a surplus. To sit down and talk with us, to negotiate what the city will contribute to the construction of this dam, working out of the expense of some of these details, such as chlorine and other things. We were happy and willing to do it. We have not been invited to sit down and work these things out, other than being told on 2 occasions that the plans for the 36-inch had been approved, but there are no funds.

We feel that it was the intent of the Committee on Appropriations that any funds authorized for the construction and work on the Fort Gibson Dam could be used on this, that any surplus they might have could be used on this now.

FURTHER DISCUSSION OF INTENT OF LANGUAGE

Senator KNOWLAND. The only thing that brought about the chairman's comment on it is that he did not want to be read into it the implication that the Federal Government had assumed, by the language in the report, the obligation to construct a 48-inch line, or the total cost of such line, or indeed the total cost of any line, necessarily, by the language of the committee reports themselves. All they were, as I understand them, was that the Congress was authorizing and directing the engineers to cooperate with the city in working out this problem.

Now, cooperation is normally a two-way street, and presumably it would require some activity on the part of the city as well as the Federal Government. The language itself I do not believe necessarily implies that the Federal Government was assuming the total cost of the burden.

Mr. BEARD. Well, Senator, that is probably correct. Our interpretation, as we understood the meaning of the language put in the bill, that the intake should be moved upstream to connect with the Fort Gibson Dam, was that that referred to the flow line, that that is what that language meant.

The city of Muskogee, as I have said, is willing to vote a bond issue to pay for the difference in cost between the 36-inch line that the engineers proposed and the 48-inch line.

There are a lot of figures involved in this sort of thing, and that is why I have made reference to our intake and tunnel capacity. The 36-inch line will not deliver to our water plant what our pumping capacity is and has been for a long time. A 48-inch line will. A 36-inch line, as I understand it, will deliver our pumping capacity to our intake, which is 54 inches in diameter. But there is necessarily a loss in gallonage by carrying it on through that distance.

I will admit there are arguments pro and con on whether it should be 36 or 48. But we are willing to sit down and talk out some kind of a conclusion as to what the engineers will do and what we will do. Because what we want is the flow line, and it is our feeling that because the engineers have not discussed it with us, there is some

reluctance on their part—as I read you this letter in 1950 from the executive officer in Tulsa. He assured us that their plans would be finished in a short time and they would come down and talk with us. They have never done it.

Senator KNOWLAND. Due to the apparent misunderstanding that has developed out of the language in the previous reports, the Chair, speaking in his individual capacity, would want to be sure than any language instructions which this committee may write into the report would not be subject to such misinterpretation. If by making available, the unused portion of the funds that might have been previously allocated, it could be interpreted that we were confirming an obligation on the part of the Federal Government, the committee report should be clear. If by making available $500,000, or whatever funds might be left, we were thereby making a downpayment on the total cost of building a 48-inch line the committee should be fully aware of the possible interpretation that can be placed on the language.

I think in fairness to the community and to the Federal Government we should make that perfectly clear in this discussion.

Mr. BEARD. Yes, sir.

Senator KNOWLAND. As well as in the committee report; we should make it clear that we are not obligating the Federal Government to do it, but that the problem will have to be worked out on a mutually satisfactory basis prior to the expenditure of any of those funds for that purpose.

Mr. BEARD. Yes, sir. In the conclusions I am about to make, that is what we have asked for.

REQUEST OF CITY

If you will permit me, Senator, I will conclude this statement, and I believe it will indicate to you that that is our desire, more or less as you have stated it.

It is the desire of the city of Muskogee that the Congress of the United States direct the Corps of Engineers, by specific legislation, to do the following:

(*a*) Construct a flow line from the city's intake on the Grand River to the outlet provided in the Fort Gibson Dam for that purpose, such line to be of sufficient side to provide a reasonable replacement of the city's intake capacity.

(*b*) Use any current surplus to initiate construction of the line. It is further requested that adidtional funds be provided from year to year to complete the flow line and that the Fort Gibson Dam project be considered incomplete until the flow line is completed.

Now, Senator, as I have stated, the city feels that it is in desperate need of this waterflow line. Last summer produced a very critical condition on that river.

Senator KNOWLAND. Now, before the construction of the dam, did you have any drought periods where you had difficulty with your water supply?

Mr. BEARD. Oklahoma, Senator, goes through these drought periods quite frequently. We have always had normal, adequate, raw water supply from the Grand River. We have never experienced anything like we experienced last summer, to my knowledge, or from the records I can read.

There is one other thing. I am not prepared today to go into the merits of this size of a line or the need for a line. Senator, I can assure you that there are engineering studies that will show you that regardless of how the dam is operated by letting water through there for power or flood control, either one, the city is exposed to great potential danger from the Arkansas River, which is highly polluted, with a high mineral content. No city has ever been able to use the water for any kind of domestic supply. That has been tried, and the effort was abandoned.

Senator KNOWLAND. Thank you, Mr. Beard.

Mr. BEARD. Thank you, Mr. Chairman.

CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL

FLORIDA RIVERS AND HARBORS

STATEMENT OF HON. SPESSARD L. HOLLAND, A UNITED STATES SENATOR FROM THE STATE OF FLORIDA

PROJECTS REJECTED BY BUDGET BUREAU

Senator KNOWLAND. On the next project, Senator Holland and Senator Smathers are here with a group from the House of Representatives.

Senator HOLLAND. If I may, Mr. Chairman, I will make a brief general statement and then introduce Senator Smathers and others who are here, and afterwards conclude with a brief statement.

Senator KNOWLAND. Very well.

Senator HOLLAND. First, if the Senators on the committee will turn to table 1, page 2, I would like them to there see the full picture of Florida flood control and rivers and harbors work as it is set forth.

CHARLOTTE HARBOR

You will note in the first place that the engineers suggested several additional navigation projects, all of which were rejected entirely by the Budget Bureau. For instance, the first is Charlotte Harbor, on which there has already been spent $194,500. The $244,100 requested would have concluded that important work, but it was denied.

GULF INTRACOASTAL WATERWAY

The next item is in connection with the Gulf Intracoastal Waterway, which extends from Apalachee Bay, Fla., to the Mexican border. $96,600 was requested to complete a relocated short segment coming into Pensacola Bay from the west, necessitated by great difficulties of navigation of the present link when the wind comes from a certain direction. That, too, was denied.

TAMPA HARBOR

In the case of Tampa Harbor, our busiest harbor, a request of $796,900 was denied. All of those items were completely denied.

CENTRAL AND SOUTHERN FLORIDA FLOOD-CONTROL PROJECTS

Now, if you will notice the ones where there was some amount recommended, you will see that the first of them is the central and southern Florida flood-control project, for which there was an appropriation last year of substantially $5 million, and for which the engineers requested another appropriation of substantially the same amount, $5 million for fiscal year 1954. That was cut down by the original budget recommendation to a million and a half dollars, and then reduced more recently by this revised budget to $800,000, cutting down the amount which would have been required to carry on the work in that important project, from substantially $5 million to $800,000.

JIM WOODRUFF LOCK AND DAM

If you will look down, then, to the Jim Woodruff lock and dam, which lies at the other end of our State, on the Apalachicola River, you will find that on that project, which is nearing completion, and which was supposed to have been formally closed in October, and on which, when there was a slight reduction last year, the engineers made it very clear that unless they got the full amount requested this year they were going to be postponed in the closure and in the making available of the power as well as the navigation and flood-control benefits, the Budget Bureau again cut the request, which was $10,483,000. They cut it in their first report to $10,400,000, which was all right, because they could complete on that, and then on this revised estimate it is cut to $7,900,000.

CUTS PROTESTED

Now, we are tremendously hurt in our program in Florida by the action of the Bureau of the Budget, and frankly, for the first time since I have been in the Senate, we are protesting vigorously against these cuts, which we think in every instance are false economy.

There will be some other items not budgeted which we will discuss before we get through today, but which I will not attempt to discuss at this time.

I think we will save time if I introduce first my junior colleague, Senator Smathers, and then my colleagues from the House and others. Then if I may complete my statement, I will appreciate the opportunity to do so.

Senator KNOWLAND. Yes.

BENEFIT RATIO

Senator HOLLAND. Before introducing Senator Smathers, I simply want to remind this committee that this central and southern Florida flood-control project has probably the largest benefit ratio of any similar project in the Nation. It is above 4 to 1 on the authorized first phase, and above 3 to 1 for the entire project. And likewise it has the very gravest of implications upon our tax structure and our developmental structure, as shown by the enormous losses sustained in the floods of 1947 and 1948. I believe the loss in 1947 was about $57 million. The amounts of such huge losses would themselves have financed this entire project and even the amounts sustained by way of tax losses would soon finance the project.

This project is not set up as a wholly Federal project. The State is required to bear 39 percent of the cost of the entire project, and is way ahead of us in their handling of their part of the expense.

The proposal to slow this vital project down so as to come to a complete standstill at the end of this next year, to me is completely incomprehensible. I do not see how anybody clothed with any reasonable business sense could come to such a conclusion, and therefore we are protesting very, very vigorously the inadequate appropriation recommended for this project.

JETTY CONSTRUCTION AT CANAVERAL HARBOR

With reference to the Jim Woodruff cut, I understand now from the engineers that they have revised their plans, slowed down somewhat their program, and that they will accept the $7,900,000 and confine their spending this year, and they think that they can dovetail that amount into their slowed down project. So we are going to confine ourselves mainly to the flood control presentation and to some other incidental projects, one of which, the jetties at Canaveral Harbor, is so impressive that I think construction should certainly begin at the earliest possible date.

At this time, Mr. Chairman, I will ask Senator Smathers to proceed with the presentation.

Senator KNOWLAND. Then, as I understand, after Senator Smathers makes his presentation, you will go to the House Members, before you go to the outside witnesses, because I know they have problems over at the House, and the Chair would like to extend that courtesy.

Senator HOLLAND. I would like to handle it that way. And at the end, if I may sum up, I would like to do so.

Senator KNOWLAND. All right.

Senator Smathers, we are glad to have you with us today.

STATEMENT OF HON. GEORGE A. SMATHERS, A UNITED STATES SENATOR FROM THE STATE OF FLORIDA

PREPARED STATEMENT

Senator SMATHERS. I have a prepared statement, which I would like to submit for the record, Mr. Chairman.

Senator KNOWLAND. That may go into the record in full.

(The statement referred to follows:)

Mr. Chairman, I wish to thank this committee for the opportunity of appearing here on several matters which concern all the people of our State and which have a direct bearing on the well-being of the entire Nation. All of us have for several years preached to our people that we believe in economy—and we do. In fact, I am confident that one of the reasons that the State of Florida voted overwhelmingly for President Eisenhower was because they believe that he would effectuate sensible and practical economy measures in the operation of our Government.

I am sure that everyone recognizes that there is a difference between false economy and true economy. True economy is where you are able to eliminate waste, extravagance, and duplication in the operation of the Government; whereas false economy is to cut appropriations recklessly and without consideration, resulting in a loss of money previously invested and a loss of beneficial services to the people. Further, we recognize that in this administration's efforts to bring about sensible economy we, like every other State, must be willing to suffer certain cuts in appropriations.

For that reason, we who represent the State of Florida here in the Congress are not asking for appropriations for many projects which heretofore we have discussed, but we are merely asking that this Congress follow a policy of appropriating sufficient money for those projects which can be justified as necessary to the national defense and those which fall under the classification of wise investments.

In view of this, it is my intention here this morning to concentrate on two major projects in the civil-functions bill. The first has to do with the Jim Woodruff lock and dam to be built on the Apalachicola River in north Florida. As you gentlemen well know, this is a three-State project, being sponsored by the representatives of Georgia, Alabama, and Florida. This project was considered desirable by the Department of Defense and, as a matter of fact, the Bureau of the Budget recommended a sufficient amount of money to develop and bring about the completion of this worthwhile project.

With reference to our other major project—the southern and central Florida flood-control project—there is almost unprecedented support throughout our State for what is recognized as a great and beneficial undertaking. It is a cold business proposition of great magnitude which will bring major returns on the investment.

With the progress already made on the projected giant system of dykes, canals, pumps, and conservation lakes, strict calculations of the engineers already have been revised upward to indicate a more than 4-to-1 favorable proportion in the coreturn to cost ratio.

Indicating its widespread support throughout the State, our State legislature already has taken positive steps to provide its share of the costs. This is no Federal boondoggle, Mr. Chairman, for the State is paying approximately 40 percent of the construction cost and, upon completion of the program, will assume the maintenance costs which will run into the millions of dollars annually.

But this program is not a Florida, or sectional, undertaking. It has been classed as a national emergency project. The area of Florida to be improved by the completion of this flood control and water conservation includes many hundreds of thousands of acres of the Nation's most fertile and productive soil.

This is the area that is known as the Nation's winter vegetable basket. Here are grown the fruit and fresh vegetables capable of supplying most of this Nation with the health-giving vitamin-packed irreplaceable fresh foods to which much of our year around standard of eating is due. It was this area which supplied the vegetables which filled the stomachs upon which our armies traveled to victory in World War II.

It is because of the importance of the area to our military messes that this program has been classified as a project vital to national security and carried therefore on the must list through many years.

Mr. Chairman, we all know that programs of this kind are not decided upon political considerations. But let me remind you that I am not suggesting you agree, or disagree, with an administration of a party opposite from your own. For it was the Democratic administration which inherited the approval of the Republican leadership of the concept of this giant long-range program. It was the Republican controlled 80th Congress which in 1948 passed the authorization act under which this program was begun. As you will recall, that was also an economy-minded Congres, but there was almost unanimous agreement in that Congress, as I feel there should be in this one in which Republicans again have leadership responsibility, that the Florida flood control and water conservation program was sound economy and desirable from a national viewpoint.

I do not wish to be overly critical of the leadership of this administration which has denied previous recommendations for a $5,000,000 appropriations and reduced to $800,000 the contemplated fund for this great program. I am inclined to believe that in their haste to save money they have been led away from the true facts and through misunderstanding are about to engage in the waste this "saving" would bring. I believe that when the Members of Congress are brought face to face with the true facts that again they will join, Republicans and Democrats alike in realistically supporting this program.

Let me tell you the simple story of what has happened in the past few years in central and south Florida.

Moved by patriotism and convinced of the need for the long-range improvements which will come after some years, the citizens who own and till the fertile acres of this winter wonderland have cooperated with this program. In a few years they realize that their present inconveniences will be gone and that the hazards

of both drought and flood will have disappeared. Meanwhile, the partially completed project is bringing annually losses, inconveniences, and actual dangers to them.

They feel that the Federal Government is threatening to go back on its word. The truth is that if we leave them in their present predicament, they will for many years be worse off than before this project was undertaken.

Their plight is like that of a man whose house had a leaky roof and who was promised a new roof to eliminate the leaks.

His benefactors turned to with a will and removed the old, leaky roof. But once the roof was off and the cost of replacing it with a new one faced them, the benefactors felt a sudden urge to thrift and declined to go forward with the undertaking.

When the winds and the rains came, the unprotected home was flooded from the skies and the winds added to the tumult and the damage. The benefactors turned out to be instead malfactors, for the home was destroyed, where with a leaky roof only minor, repairable damages had occurred annually.

That is what is happening in south Florida. I had this called to my attention last fall when I was visiting the State.

Here are pictures taken by the Miami Daily News and furnished me at my request to bring before this committee as evidence of what is taking place.

These pictures show what is happening to the home whose old leaky roof has been removed and which since has been left exposed to the elements.

Here are storm waters caught by the newly laid dikes. These dikes will store up these waters, prolonging flood conditions, until another phase of this improvement program is entered.

The longer we delay the continuance upon a broad scale of this undertaking the greater will be the suffering, the more widespread the damage; and the less economical will the policy appear.

During hearings on the authorization act for the Florida flood-control program, Mr. Chairman, it was brought out that during 1 year, one farmer alone paid to the Government more than $800,000 in tax on income derived from sale of a single year's bean crop.

If we make this foolish cut in this project, it is safe to say that there will be many years when this farmer will not be paying this tax—and when many others will be paying less taxes and in many years probably no taxes at all.

Mr. Chairman, I believe this Congress is going to return this 1 farmer's taxes to improvement of the area, as the present administration's budget makers propose. But I believe the Congress is going to reinvestment that $800,000—and add to it the taxes of 5 other farmers exactly like the first.

Statement of Congressman Lantaff

Senator Smathers. And then, here is a statement from Congressman Lantaff, who lives in the southernmost district of Florida. He wanted to be here, but had to appear before a House committee at this same time.

Senator Knowland. That may be printed in the record at this point.

(The statement referred to follows:)

Statement by Bill Lantaff, Member of Congress on Appropriations for Flood Control During Fiscal Year 1954

Mr. Chairman, members of the committee, I would like to join the other members of the Florida delegation in urging favorable consideration of a request for $5 million to continue construction work in the central and south Florida flood-control district during the fiscal year 1954.

South Florida suffered approximately $50 million in damages in the floods of 1947; in 1949, water again brought about a $25 million loss; and another flood in 1950 resulted in damages totaling $50 million.

As a resident of Miami Springs, I recall wading around in water for days. My children were unable to go to school for several days because of the disastrous flood that hit our area. I remember all of us having to take typhoid shots, and while it isn't pleasant to talk about, the high waters had caused septic

tanks in the area to overflow, which brought about the imminent danger of an epidemic.

Since much of the area in which these flood conditions occur is agricultural, a recurrence of such losses would have a resultant effect of lessening our agricultural production and present a serious threat to our whole mobilization effort.

We do not wish to see another disaster in south Florida such as the one a few years ago which took 2,500 lives around the Lake Okeechobee region. We are trying to prevent further serious losses to the farmers of south Florida. We know that the municipalities and local units of Government in the areas affected with past floods, would be financially unable to cope with another flood problem. Hence, those of us in south Florida are solely dependent upon the flood-control program to prevent a recurrence of these and more serious conditions.

But in addition, this request of the central and south Florida flood control district for $5 million to complete the consruction work is a sound investment for the Federal Government. Increased productivity in this area will return more in taxes alone than the sum requested. Early completion of this project is clearly within the national interest.

We feel it is imperative that this work be continued and further urge that the construction be expedited in fiscal year 1954 and through to completion. Favorable action on this request by the committee will be deeply appreciated by all of us in south Florida.

GENERAL STATEMENT

Senator SMATHERS. I will try to be very brief, Mr. Chairman, because all of us are busy, and I know you people are particularly so. I am sure all of us recognize that we want economy. I doubt if there was a Senator who made a speech any time last year who did not at some time or other say that we had to have economy, and that we must squeeze out the water, eliminate the duplication and the fat from the budget wherever it can be found.

The State of Florida, as a matter of fact, voted for General Eisenhower, and I'm sure that one of the reasons for their vote was that they believed he would bring about economy in the operation of our Government. However, I am sure that all of us also recognize that there is a difference between what amounts to true economy and what amounts to false economy. It would be impractical and wasteful, of course, to stop a project or a building which, if completed, would bring in returns to the Federal Government, or which, if completed, would render great benefits to the people. To cut appropriations for such a project is false economy. For such programs are in reality wise investments in the future.

WISE INVESTMENT

As Senator Holland has already pointed out, these two projects, Jim Woodruff Dam and the central and southern Florida control project, fall in the category of wise investments. And we agree that all the others that he has mentioned also come along in that category, but it's these two that at the moment I want to primarily give my attention to.

Senator MUNDT. What is the percentage of completion?

Senator SMATHERS. The Jim Woodruff Dam, as the Senator pointed out, was supposed to be completed last October, and I think it is about 90 percent completed right now. The engineers have now revised their program, because of the change in the recommended

appropriations and I believe they estimate, they can complete this project now within about a year and a half.

Senator HOLLAND. Mr. Chairman, might I supplement that statement at this time?

CONSTRUCTION SLOWDOWN

The cost of the completed project would not be shown a hundred percent net by that time, but the cost of the construction of the dam and of the lock and of the installation of the machinery, and also the acquisition of the lands, and the clearing of the lands, which would be covered by the enormous lake that will back up in the Flint River and the Chattahoochee River Basins, is all put together to give the full cost. So that the construction cost there is nearing completion. And they are being slowed down on other factors of their work. They are being slowed down as to the completion, for that matter, of the dam and power units and lock.

Senator MUNDT. Would the $10 million have completed it entirely?

Senator HOLLAND. It would have completed those right at the dam; yes. But, as I understand it, they have revised their schedule and slowed it down, and as I understand from them—and I want to hear from them definitely on this later—the $7,900,000 is what they can spend this year there at the dam under their present schedule of construction, which is a slowed-down schedule.

If that be the case, we have got to take our part in the economy effort along with everybody else. But I do want the record to clearly show just what the engineers' schedule is. They have revised it. But they are nearing completion.

Senator ELLENDER. They must have had an unexpended balance in the last fiscal year, or will have.

Senator HOLLAND. Maybe General Chorpening will state why the schedule has been slowed down and why the $7,900,000 will be sufficient for this fiscal year.

STATEMENT OF BRIG. GEN. CLAUDE H. CHORPENING, ASSISTANT CHIEF OF ENGINEERS FOR CIVIL WORKS

REVISION OF PROJECT ESTIMATES

General CHORPENING. We, at the time we revised all the projects in February, took into consideration the situation as it existed at that time. On the Jim Woodruff Dam, on those contracts we have entered, we did get some better bids than we had anticipated. So that would enable us to reduce our amount somewhat.

Also, we have been plagued there continually by difficult and slow work on the foundations. And that held us up somewhat, which resulted in a slower expenditure of funds than we had anticipated.

As a result, in reviewing the figures in February, we concluded that the amount now in the budget, $7,900,000, would be adequate, with this one exception which we pointed out.

We are in a program now, countrywide, of endeavoring to reduce as far as possible our clearing costs. That has been a very large item in some projects, particularly in this region. We had hoped, and we still have slight hopes, that maybe we could have a modified clear-

ing program that would enable us to perhaps leave uncleared some land there. However, that is a matter that must be worked out with the States involved. We want to conform to what the States like to have.

It is the public-health people that come in on it. It now appears that we may not be able to curtail that clearing. In that event, the $7,900,000 would be short by approximately $1 million.

UNEXPENDED BALANCE

Senator ELLENDER. What is your unexpended balance, General?

General CHORPENING. I understand it is a little over a million. I can check that exactly here, I think. But the unexpended balance at the end of this year, considering the size of the project, is not going to be out of line.

Senator ELLENDER. I see.

Senator SMATHERS. This is a three-State project—Alabama, Georgia, and Florida together. It means much to all.

Senator HOLLAND. Mr. Chairman, might I again just intervene and ask this:

General Chorpening, is it not a fact that anything that slows down the ultimate performance of this unit for the production of power is uneconomic and cannot be justified?

General CHORPENING. That is correct, sir.

Senator HOLLAND. Well, how soon do you expect to close for the production of power? I understand the temporary dam you have there now is banking up the water. But I mean, to close the dam proper for the production of power, and have the power machinery in there under your present program.

SCHEDULED DATE OF BEGINNING POWER PRODUCTION

General CHORPENING. November of 1954, sir, is our present schedule to put the first power on the line.

Senator HOLLAND. Then the project is delayed 11 months; is that it?

General CHORPENING. No, sir; I don't believe so. We were talking about closure, before, at a somewhat earlier date, but I don't think there has been any appreciable back-up on the production of power. I think perhaps 2 or 3 months; not a year.

Senator HOLLAND. Would a million more than this $7,900,000 assure your production of power by November of next year?

General CHORPENING. A million more in here would take care of the contingency that I have pointed out, that we have encountered, and which was pointed out at the time we made our revised estimates to the Bureau of the Budget.

Senator HOLLAND. Mr. Chairman, if that is the case, I withdraw my statement heretofore made that we would accept the $7,900,000, because I think it is obviously very false economy to slow down the production of power there and the completion of this project by the mere withholding of a million dollars.

Senator SMATHERS. I do not think you said that. You said that the engineers had accepted it.

Senator HOLLAND. That is right. I had not apparently completely understood their position, and since they asked for an additional million, I certainly support it.

Senator MUNDT. Have you been successful in getting a firm commitment from the engineers that if you get that million you are going to get your power in November?

Senator HOLLAND. If we have not, I hope you will aid us in that.

General, if we get an additional million dollars in this bill for the Jim Woodruff project, can you give us power by November 1954?

General CHORPENING. That is our best estimate at this time, sir. For me to make a complete guaranty when I have some elements to contend with is an impossibility, sir. But that, sir, is as we see it now.

Senator HOLLAND. With that additional million, you see no reason why you cannot produce power with a completed project by November 1954?

General CHORPENING. That is correct, sir. And I also want to make this statement: That I have not yet completely given up on being able to work out some clearing at a reduced rate. I hope that we may be able to do that, but I would feel more comfortable if I had the money, so that in case we cannot, it is there.

Senator SMATHERS. All right, sir.

AUTHORIZATION FOR CENTRAL AND SOUTH FLORIDA PROJECT

Now, as to the central and south Florida flood-control project, that was started in 1948, under a Republican House, at a time when economy was again the watchword. They believed, Republicans and Democrats, over there that it was justified, and they granted an authorization of some $16,800,000.

Since that time the project and development has gone forward. The purpose of it was to stop those bad floods in the south Florida and central Florida area, which, in 1947, did about $52 million worth of property damage and cost some life and much confusion. At one time around Lake Okeechobee, I think it was estimated that upwards of 2,500 people lost their lives in a hurricane by virtue of the lack of flood-control facilities around the lake. In any event, to try to stop these devastating floods and resultant waste, the Congress authorized the project. And since that time, they have gone through, appropriating money each year, in order to carry it forward.

Now, the situation is such at the moment, as I understand it, that if this project is for all practical purposes brought to a standstill, it will actually result in greater damage and have more evil effect on the people who live in central and south Florida than if the project had never been started.

I have some pictures here which were taken last fall, October 1952. They show that by reason of these partially completed dikes and levees, and because some canals have been deepened to drain off water at a rapid rate and because others have been started and not completed, the water is now backing up on a lot of people's land and racing over others, and as you can see, it has driven people out of their homes—ruined pastures and farms. There is a picture of cows having to be up on a little island there. And you will see a Florida cowboy who needs water wings in this one; and there's an amphibious tractor that is almost flooded out. And here are some additional pictures. This is the situation in which we now find ourselves.

If we do not go forward and actually complete this project, or at least complete these levees, we are going to have a worse situation than we had before.

THREE-PHASE PROJECT

Senator MUNDT. Is this condition of increased hazard going to prevail until the full $96 million is expended?

Senator SMATHERS. No, I would not say that at all. This has been divided into several phases.

Until we get this first phase of it completed, which was designed to protect life and property along the lower east coast area and at the same time to establish a water conservation area—if we can get that much of it done, which is the first phase of this three-phase project, we will not have the situation existing which you are now looking at.

But to stop it now which would be the result of cutting this appropriation from $5 million to $800,000, we are going to have this flood again probably this fall.

STATE'S SHARE OF COST

This is not an ordinary Federal flood-control project, because in this instance, the State of Florida is putting up what amounts to 39 percent of the total cost. And the State legislature has, in each instance, always appropriated its part of the money.

In addition to the money which it has put up, it has given thousands and thousands of acres of land.

Under the project, after it is finally completed, the cost of operation and maintenance is borne by the State and not by the Federal Government. For the Federal Government at this stage to stop, in this appropriation, amounts to a breach of faith, it seems to me, with the people of Florida.

As has been pointed out, the ratio of benefit to cost of this project is probably higher than probably any other project that will come before this committee.

It has been established that when these farmers in what amounts to the winter bread basket of America are able to produce these winter crops, the beans and the cucumbers and the tomatoes, things of that nature, it is well established that they make plenty of money, and of course, the Federal Government gets a big cut of it.

Senator MUNDT. How much of the $96 million, Senator Smathers, is involved in phase A?

Senator SMATHER. The $96 million is actually the first phase. But I think the Army engineers will tell you in a minute or two when they have an opportunity to testify that if they can continue on with this for another 2 or 3 years at reasonable appropriations, 6 to 8 millions of dollars, the situation which now exists, where many of the farmers and cattlemen are now flooded out, can at least be remedied.

As I say, I am sure that everybody in the State and everybody who has given any thought to this project at all agrees that this is a wise investment. It will return to the Federal Government in taxes alone more than will be expended on this particular project. And I certainly want to join with Senator Holland and the Congressmen here and the Army engineers in urging this committee, for the first time in

my experience, that they increase this amount, of $800,000 back to the figure of $5 million.

Senator HOLLAND. Before we call the next witness, I wonder if I might explain this map to the members of the committee. Each of you has a copy of it before you. This can be off the record.

(Discussion off the record.)

Senator HOLLAND. Mr. Chairman, this is Congressman Rogers, from the Sixth District, which is greatly concerned about this problem.

STATEMENT OF HON. DWIGHT L. ROGERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

PREPARED STATEMENT

Representative ROGERS. Mr. Chairman, I see according to the record I still have the rules of the House binding on me; I cannot exceed 5 minutes.

I have a statement, Mr. Chairman, pertaining to the central and southern Florida control project that I wish to file.

Senator KNOWLAND. That may be printed in the record in full.

(The statement referred to follows:)

STATEMENT OF HON. DWIGHT L. ROGERS ON CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL PROJECT

Mr. Chairman, distinguished members of the Senate Committee on Appropriations, I appreciate the opportunity to again appear before you for the purpose of speaking in support of the all-important central and southern Florida flood control project and to appear with the other members of our Florida delegation and our local witnesses who have come to Washington to testify in connection with this long-range multiple-purpose project.

You are, I am sure, familiar with our overall flood control and water conservation program of the State of Florida. The central and southern Florida flood control project, authorized in the Flood Control Act of 1948, is of vital concern to me as the Representative of the Sixth Congressional District of Florida. The very heart of this project is located in my district. Never before in the history of south Florida has an engineering plan and a federally authorized project done so much to generate public confidence in the future of our agricultural economy. Florida's interest in this project was translated into positive action as early as 1949 when first State funds were appropriated to cover the local share of costs under this cooperative Federal-State program.

This is one project, the completion of which is in the national interest and security. This area must be protected not only to preserve human lives but to protect agricultural lands for the production of foodstuff. This area can easily be called the "winter bread basket of America" and, of course, the production of winter vegetables and winter crops is necessary for the feeding of our population and, in addition to that, our Armed Forces.

In view of the fact that financing of this project is a joint responsibility of the Federal Government and the State, it is necessary that the local flood control district and the Corps of Engineers cooperate closely on advance planning. The flood control district and the Corps of Engineers adopted jointly a 10-year program of construction for this project in July of 1952. This 10-year program formed the basis for the budget request to the Florida State Legislature for the coming biennium. Already the State legislature has appropriated the sum of $3,250,000 to meet the State's share of cost for the next 2 years. This amount of money was requested because it would be required to carry out the State's share of the construction program provided for in the above-mentioned 10-year program. With the appropriation of approximately $5 million for fiscal year 1954, this project can be put on schedule as reflected in the 10-year program of last July and important benefits will be realized at an early date in the area to be protected by these works. Construction work

has advanced to the point where if the project is permitted to be materially slowed down or stopped entirely at this point, the area is worse off than was the case when the project was begun in January of 1950. The presently developed agricultural area of 301,920 acres urgently needs the protection against flooding which will be afforded by the channel improvements of the major canals traversing the agricultural area. In addition, the safety of this tremendous investment in improved lands will be in jeopardy until the major pumping facilities are provided to remove surplus waters from this area during the rainy season. It is requested that this project be permitted to go forward with all possible speed.

Once again I thank you for your courtesy in permitting me to appear before your committee and I urge upon you the inclusion in the Army civil functions bill for fiscal year 1954, $5 million for the continuation of construction on the central and southern Florida flood-control project. I pledge to you the continuing support of the State of Florida under this program.

ESTIMATED COST

Representative ROGERS. And I want to make 2 or 3 observations with reference to this project.

In 1948, as you know, during the 80th Congress, this project was approved. It was an overall project with an estimated cost of around $208 million, and you did give us approval of the first project, which was to cost $70 million.

Now, the State authorities have acted with great confidence, in the belief that the Federal Government had approved that and we were going on with it.

And as evidence of that, Mr. Chairman, there was created the Central and Southern Florida Flood Control District, which embraces some 17 counties and embracing this flood-control area for which we are seeking at your hands to get an appropriation today of $5 million in order that it can be carried on.

Up to the present time, if I have the figures correctly, and I may not have the latest figures, the State legislature has appropriated $6,128,125 through June 30, in addition to the amount referred to by Senator Holland. This is State appropriations, in addition to the amount the districts have put up. And Colonel Gee will relate the full amount that the State of Florida has come up with.

Having faith in the Federal Government, we are going ahead with this project. They have, already, Senator Knowland, made a biennial appropriation of $3,225,000 to carry their burden on for the next couple of years.

I want to state that while most of this area is in my district, the Florida delegation is unanimous, and every Congressman in the district supports this flood-control project, because it is not only a State project but a national project.

GOVERNMENT INVESTMENT

I would like to call your attention to the fact that though we are all for economy, and I know you are, Senator, because I have heard you speak, and I have heard you emphasize economy, yet there is a great difference between false economy and investment. I think the Government here is making an investment.

And as stated by Senator Holland, the ratio of benefits to cost is around 4 to 1.

Thus, if we can complete this project, it will mean that it will sooner or later liquidate itself.

This, I might state further, is valuable for the preservation of property and also for the prevention of the destruction of life. I believe Senator Smathers related to you how many lives were lost there in 1928. And in addition to that, it is what I would call the winter breadbasket of the Nation, because it is down there, as you know, that we produce all these vegetables that are used during the winter months. And especially would that be important if we happened to get into a great conflict. I just wanted to make that reference.

New River, Fort Lauderdale, Fla.

AMOUNT REQUESTED

Mr. Chairman, I have one other project for your consideration and request that my statement follow the flood-control project.

We have a New River project for which we are seeking an appropriation of $90,000. That is to clear out and deepen the New River to a depth of 8 feet; and widen to 10 feet. That is the river that practically runs through the center of Fort Lauderdale. It has reached the point where we cannot have navigation going up and down the river except at high tide.

This project was recommended in the 76th Congress. I think Mr. Harry H. Woodring was the Secretary of War when they made a report, and they recommended the cleaning out of the shoals and the rocks for a length of about seven-eighths of a mile from the intracoastal canal up to what is known as Tarpon Bay. Now, we have had a survey made of that right recently, I would say within the last 2 or 3 years, and it appears that the cost to finish that, or to do the work, would be about $90,000. And the local interests up above will take care of it, which will cost some $30,000.

That was authorized in the 79th Congress, Public Law 14. At that time the authorization was in accordance with this Document No. 553, which authorized $60,000. But as I say, since that time, in the 80th Congress, there was included in the budget the sum of $10,000 to make a further survey.

A further survey was made, and they estimated that the cost of clearing it out at that time would be some $75,000 to $90,000.

Now, I might state to you further, Senator, that this is an avenue of the escape of the waters from the flood-control district. This is one of the outlets that goes to the ocean. I think that justifies some assistance to our community in order that we may have navigation up and down that river.

And I have a further statement, Mr. Chairman, that I would like to offer.

Senator Knowland. That may be printed in the record at this point.

(The statement referred to follows:)

Statement of Hon. Dwight L. Rogers on New River, Fort Lauderdale, Fla.

Mr. Chairman and gentlemen of the committee, I appear before you today in behalf of and requesting an appropriation for the deepening and cleaning out, and removal of certain shoals and obstructions in New River which impede and obstruct navigation.

This project was originally recommended by the 76th Congress, 3d session, House Document 553. Since the report was made in 1939, the Congress has, by Public Law 14, 79th Congress, 3d session, authorized an appropriation in the sum of $60,000; however, the current estimate of cost, as prepared by the Corps of Engineers in 1951, is $90,000. An initial appropriation of $10,000 for advance planning was made in fiscal year 1950. No construction has been undertaken on this authorized project to date.

The local sponsor of the project is the city of Fort Lauderdale and the city commission, by resolution dated December 31, 1945, accepted full responsibility for the local cooperation, as set forth in House Document 553, 76th Congress. The city's assurance of compliance with these requirements was accepted by the Chief of Engineers on February 22, 1946.

Local interests desire to carry out certain works of improvement above Tarpon Bend, the upstream limit of channel excavation, recommended by the Corps of Engineers. It is estimated that this additional work involves the removal of approximately 60,000 cubic yards of material at an estimated cost, including engineering and overhead, of $22,180. This work would be financed entirely by local interests and would be in addition to the works carried out by the Corps of Engineers from the mouth to Tarpon Bend.

Since report No. 553 was made, the city of Fort Lauderdale has increased in population from approximately 18,000 to the present estimated population of approximately 45,000 with a winter population of 100,000 to 125,000.

There is a tremendous amount of navigation up and down New River, and the bonthouses and ship-repair yards lie just in the western part of the city of Fort Lauderdale and further west up New River; and, because of the rock shoals in this river at the present time, it has become nonnavigable and large craft are unable to ply up the river from the ocean through this channel because of the shoals in the stream and because of the silt deposits caused by floodwaters. This affects the business concerns and ship-repair yards unfavorably. In addition to the benefits that will flow to navigation, the cleaning out, deepening of the channels, and the removing of the silt will provide an escape of excess waters from the Everglades to the Atlantic Ocean. Since New River is a natural stream which is joined in its upper extremity and the outskirts of Fort Lauderdale with an artificial canal built under the drainage district program which was started back in 1919, this canal has become an important artery of drainage in the new central and southern Florida flood-control project. In addition to the shoal there has been an increase in silt deposits in the river because floodwaters in the area have been drained into the river. As a result of these deposits, at some points in the river, the depth has been reduced to less than 5 feet at low tide.

At the hearings held before the Subcommittee on Civil Functions of the Committee on Appropriations, House of Representatives, I presented resolutions adopted by the City Commission of Fort Lauderdale, Broward County Commissioners, Kiwanis Club, Lions Club, and other civic organizations all practically identical to the resolution I am presenting and making a part of this record which was adopted by the Broward County Port Authority.

For the above reasons and in order that the river may be utilized by the industries located along it, including those engaged in defense work for the United States Government, one of which is the Broward marine yards now under contract for Navy minesweepers, I urge that you make the necessary application. The economic benefit will far outweigh the small expenditure involved.

RESOLUTION

Whereas New River in Fort Lauderdale, Broward County, Fla., is a navigable stream extending westward from the Intracoastal Waterway; and

Whereas along its bank are marine industries some of which are now engaged in defense work for the United States Government in increasing volume; and

Whereas said river, which in its natural state was as much as 90 feet in depth at places and not less than 10 feet elsewhere, now is less than 5 feet in depth at low tide in numerous places; and

Whereas said river has lost its depth partially through the action of the State of Florida through dredging of canals connected with it and more recently by the United States Government through the building of the Central and South Florida Flood Control District dikes; and

Whereas Congress has approved the dredging of a channel 8 feet in depth at low tide west to Tarpon Bend, has made surveys for the dredging of the river

thence to the North New River Canal, but has never appropriated funds for any of said work; and

Whereas there is now available ample free spoil areas to receive the silt that has accumulated in the river from the operations mainly by said Central and South Florida Flood Control District, which potential spoil areas soon will be converted into residential subdivisions and thereafter be unavailable for this purpose; and

Whereas the dredging of the silt from nearby Port Everglades, through which New River has its outlet to the Atlantic Ocean, is scheduled in the next few months, which work will be soon lost and wasted if the silt from New River is not previously removed: Now, therefore, be it

Resolved by the Broward County Port Authority, a public corporation created by the Legislature of the State of Florida, That the dredging of New River at Fort Lauderdale, Fla., to a minimum depth of 8 feet at low tide be approved and urged and that the officers of this public corporation take whatever steps are necessary or proper, alone or in cooperation with other persons or associations, to have this urgent and vital work accomplished at the earliest possible date so that the depth of the river will be restored to at least 8 feet at low tide in order that the overflow water from the glades may make its way to the sea and the river may be utilized by the industries located along it, including those engaged in defense work for the United States Government.

Adopted this 12th day of December A. D. 1952, at Port Everglades, Fla.

BROWARD COUNTY PORT AUTHORITY,
By D. R. RICHARD, *Chairman.*

Attest:

R. T. SPANGLER, *Secretary.*

Senator KNOWLAND. Has this matter been presented to the House committee?

Representative ROGERS. Yes, sir; we presented it to the House committee a few days ago.

Thank you very much.

Senator KNOWLAND. Thank you very much, Congressman.

Nice to see you over here.

I might say for the record that the Senate has a calendar call starting at noon today, and it is the purpose of the Chair to recess at about 5 minutes to 12, because I have to act for Senator Taft as floor leader today. So we are going to meet again at 2 o'clock, and if our witnesses have not completed, we may have to go over to that time.

Senator HOLLAND. Mr. Chairman, if we can get through with the other witnesses, I will be quite content to come back at 2, because I will be sitting on the committee myself.

STATEMENTS OF CONGRESSMEN CAMPBELL AND HALEY

I want to offer at this time the statements of two Florida Congressmen who cannot be here, Congressman Campbell, First District, and Congressman Haley, Seventh District.

Senator KNOWLAND. They may both go in the record.

(The statements referred to follow:)

STATEMENT OF COURTNEY CAMPBELL, MEMBER OF CONGRESS, FIRST CONGRESSIONAL DISTRICT OF FLORIDA, ON THE CENTRAL AND SOUTHERN FLORIDA FLOOD-CONTROL PROJECT

Mr. Chairman, I want to thank you for the opportunity of allowing me to present this statement to your distinguished committee in support of the central and southern Florida flood-control project.

There is actually very little that I can add to what my esteemed colleagues from Florida have already said on this subject, so I can only confirm what they have had to say with regard to the terrific drainage problem that confronts us in central and south Florida. As a member of the Florida State Road Board

from 1944 to 1948, I became well acquainted with this particular problem as I had occasion to be in these areas many, many times on road-construction problems. As a result I was able to get firsthand knowledge of the vastness of these flooded areas, not only as it affected adversely our highway-building program, but also our great agriculture and cattle industry.

Therefore, Mr. Chairman, it is my sincere hope that your committee will give full consideration to this much-needed central and southern Florida flood-control project.

STATEMENT OF JAMES A. HALEY, MEMBER OF CONGRESS, FLORIDA, SEVENTH DISTRICT

Mr. Chairman, I join the other members of the Florida delegation in support of the Bureau of the Budget recommendation of $800,000 for the central and southern Florida flood-control project in fiscal year 1954, and also join in their strong request that this inadequate amount be raised to $5 million in order to properly continue this project.

As a member of the Legislature of the State of Florida, I have followed the progress of this project very closely, and I am convinced that an early completion of this project is necessary if we are to prevent great loss of life and property in this area in future years. On two occasions I have had the privilege of voting for State funds with which to match Federal funds for this project. The State of Florida has fulfilled its obligations concerning this project in fine fashion, and it will continue to do so. In my opinion the Federal Government has an obligation which it, too, must fulfill in order to keep faith with the people of Florida who are continuing to move ahead on a schedule based on a joint agreement with the Corps of Engineers.

I do hope that this committee in its wisdom and fairness will increase the appropriation on this vital project to an amount which will permit its orderly and economical development.

Senator HOLLAND. Congressman Bennett is here, and I would like him to be heard next.

STATEMENT OF HON. CHARLES E. BENNETT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

BEACH-EROSION PROBLEM

Representative BENNETT. Mr. Chairman, I would like to make just a few remarks. I want to associate myself with the remarks that have been made by the two Florida Senators.

First, let me express my appreciation for this opportunity to testify before you today. In appearing before you, I am primarily interested in presenting the beach erosion problem at Jacksonville Beach, Neptune Beach, Atlantic Beach, and Ponte Vedra Beach in the district which I represent, and in requesting a very small appropriation which would be helpful in solving this and other similar problems throughout the United States. Since there is no specific authorization for a beach-erosion project at our beaches, I understand that I cannot ask for an appropriation to take care of any specific construction project. What I am respectfully requesting is that this subcommittee give careful consideration to a small appropriation for cooperative studies, which might be used as a basis for future cooperative construction projects. We have not yet had even a cooperative study at our beaches.

COOPERATIVE STUDY

I am advised that the budget contains no funds for cooperative studies, but that the 1953 appropriation contained an item of $75,000

for this purpose. Now I realize that the members of this committee and this subcommittee are straining every nerve to balance the budget and reduce taxes, and I certainly commend you for the fine work you are doing along this line. Still, I know you are anxious to avoid any cuts which will be penny-wise but pound-foolish.

I believe that a good argument can be made that failure to appropriate for cooperative studies in 1954 might be a reduction of that type.

To illustrate my point, permit me for a minute to go back into the history of our beach-erosion problem. During the 1930's a seawall was built under a Federal construction program. You recall that these programs were carried out with the object of reviving the economy with worthwhile construction projects. Apparently, there was a tendency to go into these programs in haste in an effort to revive the economy without delay, and this project was apparently not well planned. This is indicated by the breaching and undermining of the seawall in a severe storm in 1947. Since that time portions of the beach communities have lain unprotected and another storm of the severity of that one would do incalculable damage there.

Recently, we have heard considerable speculation as to how the administration would avoid a depression in the event that its efforts at a general international settlement should be successful and military expenditures should be sharply curtailed. There is a general opinion that one way the economy might be cushioned is through needed construction projects. For this reason, it is farsighted policy to appropriate a few thousand dollars a year for cooperative studies at this time. This will give us a comfortable backlog of sound construction projects which have been thoroughly planned. Then, when we need to avail ourselves quickly of a number of projects, there will be no temptation to build poorly planned facilities; and the tragic waste of the last project at our beaches will not be repeated. By spending just a few thousand dollars now, we can insure against waste of much larger sums later.

AMOUNT REQUESTED

As to how much should be appropriated for cooperative studies in 1954, I leave to your judgment. Perhaps $75,000 is too much. But for the reasons I have stated above, I ask your serious consideration of at least a small appropriation for cooperative studies. Thank you, again, for permitting me to appear before you today.

Senator KNOWLAND. Congressman Herlong, we will be glad to hear from you at this time.

STATEMENT OF HON. A. S. HERLONG, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

LOSS IN LIFE AND PROPERTY

Representative HERLONG. Mr. Chairman, I would first like to echo the statements that have been made by my distinguished colleagues with regard to the central and southern Florida flood-control projects. I have actually stood on a soapbox in this area making a speech and seen the high-water marks up above my head there, just to show

you how much water does come into that area sometimes when these floods come during the flood season; and they do come, the chamber of commerce to the contrary notwithstanding.

I have fished with our Secretary of Agriculture and seen him catch a 6- to 7-pound bass out of the beanfields. And these property losses, sir, are as nothing compared to the tremendous loss of human life that we have suffered.

CANAVERAL HARBOR PROJECT

So I do want to echo the statements that have been made by these gentlemen. But today I want principally to direct my remarks to the Canaveral Harbor project, which is located in my district. And believing in the old Chinese proverb that 1 picture is worth 10,000 words, I have a picture here which will show you gentlemen just what is happening at this project, and I shall discuss it briefly as we go along here.

Senator ELLENDER. That is one that has not been budgeted?

Representative HERLONG. That is right, sir. And I am speaking strictly for it as an emergency project here today.

PROJECT AUTHORIZATION

This project was originally authorized in the Rivers and Harbors Act of 1945. The project is described in detail in House Document 367 of the 77th Congress. Roughly, it provides for the construction of the only deepwater harbor on the east coast of Florida between Jacksonville and Port Everglades. That there is a great need for this harbor as a port of refuge, in addition to the many other benefits, is shown by the fact that during World War II, people in the vicinity have told me they stood on the shore and watched five tankers burning at one time as a result of enemy submarine action. But we are talking today about today's emergency.

There are 3 phases to this project, 2 of which I shall discuss briefly today. The reason I shall not discuss the third is that while it is highly desirable, it does not qualify under the category of an emergency and absolutely essential. And believing, as you gentlemen do, that we must postpone some highly desirable projects which do not qualify as an emergency at this time, I am simply going to talk about the emergency angles of this.

FUNDS EXPENDED FOR DREDGING

The first phase of this project is the dredging which, as you can see from the photograph there has been completed.

To date, there has been a total of $2,580,000 of public funds spent on this project. That is all the moneys that have been spent. Of this amount, the Federal Government appropriated $850,000. The armed services have constructed terminal facilities for their patrol- and crash-boat station on the south side of this entrance channel at an approximate cost of $400,000, which makes a total of $1,250,000 which has been spent by the Federal Government on this project.

This crash-boat station, incidentally is in connection with the joint long-range project at Banana River, the Patrick Air Force Base, with which I am sure you gentlemen are familiar.

The rest, or $1,330,000, has been expended by local interests. Of this amount, $940,000 was cash: $170,000 for procurement of rights of way and $220,000 for construction of the first ships' berth on the south side of this turning basin.

JETTY CONSTRUCTION

So we have a harbor there now of 27-foot depth. But as you gentlemen know, you do not just dredge out a harbor and dig an entrance and figure the job is done. The Corps of Engineers also recognizes this. Because there is a tremendous volume of sand being constantly washed in the entrance to the harbor, about $310,000 of sand a year being washed in there, this entrance channel must be made stable. To do this job, the Corps of Engineers, in their plan, provided for jetties to protect the harbor entrance from these washing sands. The harbor entrance simply cannot be maintained to authorized or even practical depth and dimensions without the construction of these jetties. And this is the second phase of the project, which has not been completed.

The Corps of Engineers proposes a jetty south of the entrance to the harbor to extend to the 9-foot depth contour, and another jetty north of the harbor entrance to extend to the 12-foot depth contour. This can be done at a total cost of approximately $770,000 and can be completed within a year.

LOCAL CONTRIBUTION

Now, bearing this figure in mind, I want you gentlemen to also bear in mind that these local people have already contributed and spent $1,330,000 of their own money. This money was raised by the creation of a port authority, which issued and sold bonds. Naturally, they are paying interest on those bonds. The people in that area are taxed to pay that interest and the sinking fund on those bonds, and the interest alone amounts to about $55,000 a year. There is no revenue coming in. Without an entrance channel, all the money that has been spent by these local people up to now is absolutely wasted.

I have with me today, who will appear later, a member of the port authority and a county commisisoner from Brevard County, Mr. Dave Nisbet, who is familiar with all of these facts, and his great concern is how he is going to get the money to pay the interest on these bonds if they cannot have a harbor that is productive. You just cannot get people to invest money in warehousing and storage facilities in any harbor like that unless the ships can come in; and ships are not going to take the chance to come in if they do not have a stable entrance harbor.

It is true the armed services have to get their crash boats and patrol boats in and out of this harbor. So, pending the construction of these jetties, they have a hopper dredge at work constantly pumping out this sand as it washes in every day. The estimated cost of this dredging operation is from $2,500 to $3,000 a day. It does not take much of a mathematician to figure out that at $2,500 to $3,000 a day you are going to spend $3 million a year, on something that can be completed and the job done for $770,000, so it seems to me like that is just money down a rathole.

As I have said, I am told that these jetties can be completed in less than a year.

I invite you gentlemen to look at my record for economy in the Congress. I am just as economy-minded as anyone, and I hope I am as practical-minded as anyone. I hope you gentlemen feel the same way. It does not seem to me to be good economy or sound practice for us to continue like we are doing now.

As soon as this harbor entrance can be made stable by the construction of these jetties, the local interests can begin getting some money with which to pay their interest and retire the bonds. The obligation of the bonds was assumed because of the promise of the Government to complete the project. We are out of pocket to the tune of $1,330,000 plus interest, and no way to pay it back. It is actually costing the Government much more, as I have pointed out, not to complete this second phase of the project.

USE OF HARBOR BY CRASH AND PATROL BOATS

Now, you and I know that the guided-missile base there at Banana River is a permanent project, and they are going to get those crash boats and patrol boats in and out, and they are going to do it just as long as the base is there, and, as I say, it is a permanent base. And they are going to do it regardless of the cost and whether it is practical or not, because they have to get those things in and out of there.

I think one other thing I should call to your attention: The reason this is not, I believe, in the budget estimate, is simply because this report of the engineers did not reach us until the 6th of March, which was after both budgets had been completed. We are simply asking for this appropriation, not as something that is desirable but as something that is an emergency and something that will save the Government a whole lot of money.

As I say, it does not make much sense for me to spend a million dollars a year going out and spending it in monthly driblets, in order to save an original outlay of $770,00. If we want to practice some sound economy, that is the way we can do it. I do not mean to say that the dredge is in operation every day in the year, but that is what would be required to maintain the depth at 27 feet; they have only been maintaining it to 16 feet and have spent some $200,000.

Senator HOLLAND. I want to say, Mr. Chairman, that I was there last fall and winter and found on 1 day over 30 shrimp and fishing boats in the harbor on the north side of the turning basin. The Government supply boat was not in that day, but I was told that it makes weekly and sometimes biweekly trips down to the British Bahamas, on which are outlying bases of the guided-missile base, and must come in and out of the harbor. And, of course, you can see the base from which the crash boats operate, as well as the other Government structures, on the south side of the channel. The ocean is in the direction from which we are looking, and you can see the way the sand has washed in on the outer or east end of the channel. That is just a constant problem.

Representative HERLONG. Senator, excuse me, there. That picture was taken at high tide.

USE OF EMERGENCY FUNDS

Senator HOLLAND. My understanding is that the engineers have already dealt with the matter on an emergency basis by using $180,000 of their emergency funds to let the contract for the first link of the jetty—on the south side, is it, General?

General CHORPENING. On the south side, yes, sir.

Senator HOLLAND. And it is just inconceivable to me that we continue to pour money out to hold that channel open, by frequent pumping.

You see, the Gulf Stream is a great stream offshore going northward, and inshore you have reverse currents going south, and they are washing the sand at all times. This is at Cape Canaveral, the easternmost extension of the peninsula of Florida, and the currents are made more complex by that fact. The engineers had to make a study to determine just where the jetties should be. If they now know where the jetties should be, I think without 1 minute's additional delay, the money ought to be made available to complete the jetties as the Government's second phase of construction, because the local beterests are not only up to date, they have spent their money already besides turning over $900,000 to the Federal Government as their contribution to the construction. And in the interest of everybody concerned, the guided missile base, the fishing industry, and all other activities there, it ought to be completed.

I think only one other thing ought to be stated to make the need for the project clear to you gentlemen. This channel comes between the Patrick Air Force Base, which is down a few miles south and the guided-missile launching base, which is on the north side. In other words, it lies right between two component parts of the guided-missile base. It is a necessary part of the operation of that base, not only to have crash boats operating out of there, but to have the supply boat, which goes periodically down to the keys, clear that channel.

I am sure both the Air Force and the engineers will amplify this picture, but to my mind, going there and looking at the immense present expense of keeping the channel open, it was most discouraging to see such complete lack of economy, necessitated however by the fact that the currents are so complex there that the engineers had to know where the jetties should be before they could start actually building. I think they are to be commended for their caution in that regard. But now we should move ahead.

Maybe we had better complete the Canaveral matter now.

Mr. Nisbet, will you just briefly give any additional facts on this Canaveral matter?

Senator KNOWLAND. I am going to ask if Senator Ellender will carry on for me at this time. I do have to get up on the floor, and I will, of course, carefully read this record, but because of the opening of the Senate, I am going to have to go. Then we can recess at 12 o'clock.

Senator ELLENDER (presiding). All right, Mr. Nisbet.

CANAVERAL PORT AUTHORITY, FLORIDA

STATEMENT OF D. S. NISBET, MEMBER

GENERAL STATEMENT

Mr. NISBET. Mr. Chairman, I don't believe I can add very much to what has already been said by the Congressmen and Senators. I would like to say, speaking from a military standpoint, that I don't know whether they happen to know, but not too long ago, one of the crash boats connected with Patrick Air Force Base ran aground on this sandbar. That, of course, could be very, very serious from a military standpoint, I would imagine.

Also, I might mention the fact that local interests, the people at home, feel that they went into an agreement with the Federal Government that if, and provided they put up $1,300,000, the project would be completed, they would have some possibility of financing the repayment of the bonds, and certainly the payment of the interest, with revenue from the port.

We do definitely have commitments from concerns that would be good revenue to us, and we can support their revenue, I believe, by the need for their business in our east coast area, for instance, there is petroleum, there. So we feel if it was assured that the ships could come in and out, we would do enough business with the port to pay the bill.

Senator ELLENDER. When you first built this port, did you have any assurance from anyone that you would have business there?

Mr. NISBET. Yes, sir.

Senator ELLENDER. Especially when you sold your bonds?

Mr. NISBET. Yes, sir; that is true. We had considerable promise of business. There has been quite a change in that, due to the change in the citrus picture of Florida. The canned citrus products has changed the original planning of the port. It was planned that the major product would be citrus shipped to the northern market.

Senator ELLENDER. In bulk?

Mr. NISBET. In bulk. And of course, some to the European markets, which has also changed.

However, there are very large potentials in petroleum, cement, building materials, and so forth, that we have commitments from good sized concerns on today.

The biggest thing: Both the Government and local interests have spent a lot of money that is to no avail at the moment.

Senator ELLENDER. Well, according to the testimony so far heard, you have spent much more money to maintain the channel than it would cost to build the jetties.

Mr. NISBET. That is true.

Senator ELLENDER. Well, General, could that not have been foreseen? When this project was undertaken, and the channel was built, was any effort made to foresee what is now happening, that is, this piling up of sand there?

General CHORPENING. It was foreseen, Senator, that there would have to be some jetties there, and the jetties are authorized. However, it was not apparent then as to just where those jetties should be built

and how they should be built, due to the very complex nature of the littoral current at that point.

Senator ELLENDER. That could not have been determined in advance?

General CHORPENING. Well, it could have been, perhaps, but it had not been completely determined at that time.

DREDGING COST

Now, as we have gone ahead, we have found that the entrance to this channel very definitely closes up rapidly. I want to say it has cost us about $200,000 for the dredging operations that we have had to do down there.

Senator ELLENDER. Just to maintain it?

General CHORPENING. Yes, sir, to keep it maintained. And we have not been able to maintain it to any greater depth than I believe around 16 feet.

Now, we have completed our necessary studies. We believe that we know as well as anybody can know the kind of a structure that ought to be placed there. And it would, we believe, if built, obviate most of the rather considerable maintenance that we have had to expend there.

Senator HOLLAND. What about this $180,000 that you earmarked for the first unit of the construction?

General CHORPENING. Having this situation, and now knowing about what we ought to build there, we considered that we were fully justified, where we are spending the maintenance funds anyway, to take $180,000, which we have allocated, for building a small portion of the jetty, which we hope will be successful in eliminating some of the shoaling, but will not do a permanent job and a full job, as will the $790,000 that we have estimated the jetty will cost on the south side.

Senator ELLENDER. If those jetties are built, as you contemplate, how much will that reduce your costs of maintenance per year?

General CHORPENING. I would judge that that ought to reduce the maintenance there to at least one-quarter or less of what it has been.

Senator ELLENDER. One quarter or less?

General CHORPENING. Yes.

Senator HOLLAND. Let me ask you this, General: Is it not a fact that instead of having a constant southerly current, such as is expected along most of the east coast of Florida, that Cape Canaveral juts out immediately above this channel and has given you a whirling or back current, which has greatly complicated your picture?

General CHORPENING. That is very definitely correct, and I want to mention that I personally visited this project 6 or 8 months ago during a period when they had a very severe wind there blowing out of the northeast, I think it was, and that situation existed at that time.

Senator ELLENDER. Have you anything further?

Mr. NISBET. I don't believe so.

Thank you very much.

Senator ELLENDER. Is there anybody else who desires to say anything more on this project?

Senator SMATHERS. I would like to express myself as being in favor of it, Senator. I have not had a chance to be here while the gentleman was testifying.

Senator HOLLAND. Colonel Gee is the consulting engineer for the Canaveral authorities as well as the central and southern Florida flood-control district.

I will ask that he hold back his central and southern Florida testimony until this afternoon, but if he wants to be heard on the Canaveral project, now would be a good time.

CANAVERAL PORT AUTHORITY

STATEMENT OF COL. HERBERT C. GEE, CONSULTING ENGINEER

NEED FOR JETTIES

Colonel GEE. Mr. Chairman, the Canaveral project is made up of three principal components as originally authorized in 1945. The first of those, the dredging of the port and channel, has been completed. The second, the jetties, has been under discussion this morning. And the third, a lock to permit barge traffic to move from the deepwater harbor to the Intracoastal Waterway, westward, remains in the future.

The concern of the port authority at the moment is the fact that, with an invested capital of $1,365,000 representing the proceeds of a general obligation bond sale, there is no prospect until the jetties are completed that the authority may realize any return or any revenue from this very large investment.

The interest charges are of the order of $55,000 annually, and delay means still further payment of interest with no opportunity for return.

During the first year that the channel was open the very considerable fishing fleet produced a catch there valued at $3½ million during the early part of last winter's season.

Senator ELLENDER. Is that something new?

Colonel GEE. That is something brand new, because heretofore the shrimp fleet had to run from St. Augustine all the way to Fort Pierce and there was no harbor in that reach of the coast. So the shrimpers found very good fishing ground offshore, and from a small plane I had occasion to count 135 shrimpers fishing off the entrance to this harbor at one time. So that activity of the port is already well underway. And we estimate that it will be possible to handle, through this port and its terminals, about 600,000 tons of petroleum products annually.

This is the area of Florida which now has the highest-priced gasoline of any part of the State for the reason that it is most remote from a deepwater harbor.

We see, in the completion of this harbor, the opportunity to reduce those costs, and those are costs which are borne by the traveling public, not from Florida alone, but from all over the country.

Senator HOLLAND. For the record, would you say that this is the port of supply of Orlando and the central Florida area generally, and was so designed?

Colonel GEE. Yes, sir; it was designed for that purpose. The fact that the export of fresh citrus has disappeared from the scene does not affect the justification of this project, because of the very rapid

increase in the consumption of petroleum products in this area. And we are very anxious to see some return on the public investment in this project.

If there are any questions, sir, I would be glad to attempt to answer them at this time.

PROVISION FOR JETTIES

Senator HOLLAND. I would like to ask one more question.

It is true, is it not, that in the original report of the engineers, on the cooperative project, under which the cost was allocated between the local bodies and the Federal Government, the jetties were definitely provided for?

Colonel GEE. That is correct, sir.

Senator HOLLAND. By an expenditure of how much money?

Colonel GEE. Estimated to be in the neighborhood of $800,000, as I recall the figure.

Senator HOLLAND. And the thing that has held up the building of the jetties has been the unexpected current problems with reference to just what type of jetties were required to give the necessary protection; is that not it?

Colonel GEE. Which necessitated the calling on not only the Jacksonville district but engineers of the Beach Erosion Board as well, to assist in that study.

And the report on these jetties, their design and their cost, was finished only the 6th of March of this year; so obviously it was too late to be incorporated in the regular budget or even in the revised budget.

Senator ELLENDER. But I notice Senator Holland mentioned unexpected currents. Were not those currents there all the time?

Colonel GEE. Yes, sir.

Senator ELLENDER. Or did the dredging of the harbor change the situation?

Colonel GEE. Yes, but the inlet having been cut through a reach of beach produced a new current pattern which was not there before.

Senator ELLENDER. I understand.

Senator HOLLAND. You see, there is no pass until you get down to Sebastian. And that is how many miles south?

Colonel GEE. Approximately 21 or 22, I think.

Senator HOLLAND. No; it is farther than that. It is 20 from Melbourne.

Colonel GEE. I was thinking of Melbourne.

Senator HOLLAND. You see, that did make a different kind of current.

Senator ELLENDER. Then the digging of the channel really affected the currents in that area.

Colonel GEE. It changed the pattern of the currents; yes, sir.

LOCAL COOPERATION

Mr. GEE. An appropriation request for 1952 for the appropriation Canaveral Harbor project was denied, and at the time the impression was created in the Congress that local interests were not going to comply with the requirements of local cooperation set forth in House Document 367, 77th Congress.

The port authority assumed the full responsibility for requirements of local cooperation prior to the start of construction. This commitment was repeated by resolution of Canaveral Port Authority addressed to the Corps of Engineers in February of this year.

As the project now stands, requirements of local cooperation including the necessary rights-of-way for the jetties under discussion today, have been met in full.

Senator ELLENDER. Any further questions?

If not, the committee will stand in recess until 2 o'clock.

(Whereupon, at 12:05 p. m., the hearing was recessed until 2 p. m., this same day.)

AFTERNOON SESSION

The hearing reconvened at 2 p. m., upon the expiration of the recess.

Senator DWORSHAK (presiding). The hearing will come to order.

Senator HOLLAND. This is Mr. Harold Martin, who will appear on the New River project.

NEW RIVER PROJECT

CITY OF FORT LAUDERDALE, FLA.

STATEMENT OF HAROLD G. MARTIN, REPRESENTATIVE

GENERAL STATEMENT

Mr. MARTIN. Mr. Chairman and members of the committee, this morning my good friend Senator Smathers made a remark about the origin of the flood-control program of which this New River deal is an aftermath, and it reminded me that in the year 1948 he mentioned that Republicans of Florida had two major projects.

One was the assistance and initiation of this flood-control program, and the second was in the election of Senator Smathers, the first time that Republicans officially and unofficially seemed to get together on two major projects, both of which were successful.

Certainly both of them were very good examples of the cooperation between Democrats and Republicans in what was regarded by them as being in the best interests of their State.

I am here today representing a number of organizations and individuals, among whom is the city of Fort Lauderdale, which paid my expenses here, and the rest of the organizations, none of which have contributed.

ORGANIZATIONS REPRESENTED

Among these are the Eisenhower-Nixon Club of Fort Lauderdale; the chairman of the State Republican executive committee; the Marine Associations of Florida, which is composed of all marine interests of the State, firms, and corporations; Marine Industries, Inc., composed of 32 of the local marine firms and corporations of our county, and indirectly the chamber of commerce and all the service clubs of Fort Lauderdale, the port authority and the Broward County Commission.

All of these are agreed upon this one project, the flood control and the aftermath of it which requires assistance from Congress if we are going to accomplish it.

DESCRIPTION OF RIVER

New River, which has been mentioned here, 25 years ago was the deepest river in the world for its length. I personally, in my short stay there in Fort Lauderdale, have seen oceangoing vessels come up New River to the center of town, a distance of 2½ or 3 miles, on their own power and return.

Today you could hardly get a craft up there because it is so shallow in spots and particularly in the lower reaches from Tarpon Bend to the Inland Waterway, a distance of about seven-tenths of a mile.

Senator ELLENDER. What has caused that?

Mr. MARTIN. I wish I could say one thing, but there were a number of contributing causes. First of all was the Everglades Drainage District program which introduced a lot of silt into the river beginning back about 1917.

Then in 1926 the progress of the current was retarded by a hurricane which blew in some trees and rooftops and sunk a lot of boats.

Then probably the next major obstacle was caused by the United States Coast Guard located at the mouth of the river.

They excavated for dock space for their cutters which drew quite a bit of water, and instead of taking the soil and depositing it on the mainland, they deposited it in the bay, adjacent to the mouth of the river, and that in turn helped retard the flow of the current to the sea.

Since then the inland itself has filled up.

There are a lot of explanations for that, too, but among them is the silt coming down the river from these various excavations.

Up until a few years ago we could get vessels up and down that drew considerable draft, especially at high tide. Now you cannot take any sizable vessel except at high tide. These are now approaching the point where we cannot hope to have some of these major industries continue unless the depth is increased.

Among these are three concerns in the defense effort. One is making guided missiles, that is, the towers for guided missiles and bridges; another is making tugboats for the Army; and the third is making these 172-foot minesweepers.

West of this Tarpon Bend, where the major deposit is, are a number of other shoals that need to be brought out and cleared out, and the local interests have agreed to do that. The cost of that has been estimated at anywhere from $25,000 to $50,000, depending on how far up the river it is necessary to go.

COST OF CLEARING RIVER

The cost of that from Tarpon Bend to the Inland Waterways is approximately $90,000. That is a project that Mr. Rogers mentioned on at least two occasions. Appropriations had been cut for one reason or another on two occasions, I believe.

Surveys began about 1932 and there was something put in the budget in 1935.

President Roosevelt took out the first appropriation. Then, when another appropriation was made, about 1947, President Truman gave instructions, I am told, that unless it was an emergency matter, it could not stay in.

Our Congressmen and Senators have tried to get some relief down there for a good many years, and the people cannot have explained to them why we have not been given some help when Federal agencies, or those that they have assumed are, have very largely been responsible for the situation.

CONSTRUCTION OF DIKES

The last thing that has brought about the condition has been the building of the dikes in connection with this flood-control program.

I do not want anything I say here to make you think that we are not fully in sympathy with that program. It is one of those necessary evils.

The water has to go someplace, and this is a natural outlet to the sea for this water, and whatever is in it, coming from the building of the dikes. That has been sort of the straw that broke the camel's back, so to speak, in adding additional silt in the river which has made the difference between being partially navigable and almost not navigable.

We feel that there are two major things to be served by doing it; In the first place, we have a number of small farmers that grow vegetables adjacent to the river, and their land is flooded every time we have a heavy rainfall.

FLOOD CONDITIONS

Here in Washington you have had 8 inches this month. Very frequently we have 8 inches in 24 hours. Because of the level terrain, the water does not flow too swiftly in any direction. It goes to the river eventually, but in the meantime the sun beats down on these crops and destroys them.

In the city of Fort Lauderdale, which is directly affected in this way, the water comes up on the streets. Our post office is surrounded by water, up to 2 or 3 feet deep. People continue to use the streets, and every time they do, it results in the surface being destroyed and a repaving job after every major flood condition like that is necessitated.

So since we are convinced that the Federal agencies have had something to do with the condition, we propose that this bill which has been up before be enacted and relief given to us.

We are cooperating by spending approximately half of that amount to supplement what we are asking the Government to do at this very one point where the condition is at its worst.

At the present time the work can be done for less than it can be done in a year or two from now, for this reason: Midway between Tarpon Bend and the Inland Waterway is an undeveloped island, and the only one left. It can be used to pump the soil direct from the dragline, or whatever you call it, that digs it up. When that island is completed, as the owner has in mind plans at the present, then the soil that will be dragged out 2 or 3 years from now, or whenever it is done, will have to be taken out to sea at a terrific expense or cost.

URGENCY OF PROJECT

Senator ELLENDER. It cannot be put on the shore?

Mr. MARTIN. No, because it is in a residential division. Homes are built right along the shore except on this one island. So unless it is done immediately, and by immediately, I mean within the next year, it is going to cost a tremendous amount later.

COST OF PROJECT

Senator ELLENDER. What is the cost of the project?

Mr. MARTIN. Ninety thousand dollars, if it is done now, and probably twice that much if it is put off. Those are the main things I want to bring out: The flood condition, the impossibility of navigation, and the defense work which will be helped by having it.

Otherwise, these defense plants are going to have to move their location.

PREPARED STATEMENT

I have prepared a brief statement of the essential facts, which I would like to leave with the committee for the record.

Senator DWORSHAK. You do not want it as a part of your record, or do you want it filed with the clerk? Do you want it in the record?

Mr. MARTIN. I would be glad to have it in the record.

(The material referred to follows:)

RESTORATION OF NEW RIVER IN FORT LAUDERDALE, FLA., TO A NAVIGABLE DEPTH

FACTS

1926: New River was the deepest river for its length in the world—from 25 feet to 90 feet in depth. Ocean going vessels could proceed a distance of 2½ miles to downtown Fort Lauderdale on their own power.

Today: The same river is practically nonnavigable (except at high tide) from Tarpon River to the Inland Waterway where it ends, a distance of .7 mile.

Streets, farms and gardens are flooded during every substantial rainfall and remain that way for hours because the river lacks depth to carry off the rainwater. Motorists destroy the surface of water covered streets, and the sun destroys vegetation standing in water, within a few hours.

Concerns engaged in defense work and related efforts need more depth for their present operations. Among these are: Broward Marine Co., engaged in making 144 feet and 172 feet AM class minesweepers; Powell Bros., builders of guided missile towers and bridges; Smith Basin & Dry Dock, builders of harbor tugs for the Army.

Large pleasure craft in this tourist center do not use repair and storage facilities up the river because of hazards to navigation from shoals and sunken vessels.

CAUSES OF CONDITION

1. The 1926 hurricane sunk boats in the river, which retarded the flow of sand and silt from operations of drainage districts now controlled by the Central and South Florida Flood Control District, a cooperative project of the United States and the State of Florida.

2. About 1928 the United States Coast Guard (Base 6), located at the mouth of New River, excavated sand for dock space for Coast Guard cutters and deposited same adjacent to the juncture of New River and the Inland Waterway. This retarded the current so much that silt and sand reaching this point were deterred and deposited into what has since resulted as an island. This slowed up the progress of the sand and silt to the extent that New River Inlet was completely filled.

3. Beginning in 1950 the Central and South Florida Flood Control District built dikes from which sand and silt, added to what was already there, has now made the river practically nonnavigable to large vessels. The Flood Control Commission has recognized its share of the responsibility for the present condition.

RECOGNITION OF CONDITION

1932: Survey made resulted in an item in the budget for about 1937–1938. This was stricken from the budget by President Roosevelt.

1940's: On two occasions Congress authorized work but made no appropriation. President Truman opposed appropriations for this work.

1952: The Eisenhower-Nixon Club promised voters that the restoration of New River to a navigable depth would be accomplished. The Marine Associations of Florida, a nonprofit group representing all marine interests of the State of Florida, working through its local members, evolved the following proposal, which has the support of the city of Fort Lauderdale, Port Everglades Port Authority, the County Commission, the Senior and Junior Chamber of Commerce, and all major service clubs of the area. Resolutions from all of these were sent to Hon. Dwight L. Rogers, Member of Congress.

PROPOSAL

That Congress correct the condition for the .7 of a mile at the lower end of the river at an estimated cost of approximately $90,000. Private and local governmental agencies will correct the condition west of Tarpon Bend at an estimated cost of approximately $50,000.

PERMANENCY OF WORK PROPOSED

The silt from the Flood Control program has now descended to the lower reaches of the river. No more excavations producing silt are in contemplation or will be permitted locally. The work proposed will therefore be permanent. No future excavation of shoals from the river will be necessary after restoring the proposed channel, recommended by the Government engineers, is completed. Authority: Colonel Gee, engineer for Central and South Florida Flood Control District, and former United States Army engineer, Comeau Building, West Palm Beach, Fla.

G. H. MARTIN.

PROJECT EXCLUDED FROM BUDGET

Senator DWORSHAK. Do you have any comment, Senator Holland?

Senator HOLLAND. I know about the situation. I do not know why the engineers have not placed this in their budget request. Perhaps this would be a good time to ask them about that.

Colonel, could you make a statement from the standpoint of the engineers about this New River project, why it has not been placed in the budget?

Colonel MILNE. As Mr. Martin has said, Senator, this is an authorized project. We estimate the cost at $94,500, and it does have a favorable benefit-cost ratio.

To answer your specific question, why it was not included in our budget, Senator, I can only say that we have a rather restrictive budget ceiling, and within that budget ceiling we have to place projects that we think meet the criteria established by the Bureau of the Budget to the greatest extent.

There are many projects authorized which the Congress included in the backbone of the Corps of Engineers that do have the merit that Mr. Martin has pointed out, that are not included in the budget simply because the ceiling does not permit the inclusion of all of these projects.

Senator HOLLAND. This ties in with the flood-control effort very clearly. You recognize that in your report.

Colonel MILNE. Yes, sir.

Senator ELLENDER. How abous those defense projects that are going on there now?

Colonel MILNE. Senator, I am not prepared to make any comment on that. I personally was not aware of this defense situation that Mr. Martin has brought out. I would like to look into that and will be glad to furnish that to the committee, sir.

(The following information was subsequently furnished by the Corps of Engineers:)

NEW RIVER HARBOR, FLA.

The River and Harbor Act approved March 2, 1945, authorized the improvement of New River in the interest of navigation, in accordance with the recommendations of the Chief of Engineers, as contained in House Document 553, 76th Congress. The plan of improvement provides for the dredging of a channel 8 feet deep and 100 feet wide from the river's mouth at the Intracoastal Waterway, upstream for 0.64 of a mile, and for the removal of sunken vessels and snags farther upstream along New River and its South Fork to Dania cutoff canal, at river mile 7.9. The estimated Federal cost of the authorized work, based on July 1952 price levels, is $94,500. To date, no funds have been appropriated by Congress for the execution of such work.

The Broward Marine Shipyard, located at approximately river mile 4.1, presently has a contract with the Department of Navy for construction of minesweepers. Delivery of these minesweepers is scheduled to begin within the next 2 months. The river in front of the shipyard has shoaled to about 4½ feet and the mean range of tide in the river varies from 2.3 feet at the mouth to 1.7 feet at the Dania cutoff canal. The minesweepers have a draft of approximately 7 feet. The presence of other defense industries along the river has not been determined.

While the possibility of dredging a channel from the upper end of the authorized 8 feet by 100 feet channel, at river mile 0.64, upstream along New River and its South Fork to the North New River Canal, a distance of about 5.2 miles, was given consideration in House Document 553, there is at this time no authorized project for dredging in this reach of the river. An accurate determination of the feasibility and economic justification of such a Federal project under present conditions would necessitate the making of a detailed investigation of the affected area. The Corps of Engineers does not now have the necessary authority to undertake such a study and to submit a report thereon to Congress.

Senator HOLLAND. They have been launching boats down there for a long time, minesweepers and Army tugboats.

Mr. MARTIN. They are launched, but they are still at the plant, tied up.

May I add one important consideration?

Senator ELLENDER. Have you brought that to the attention of the Defense Department here?

Mr. MARTIN. No, sir; I have not.

Senator ELLENDER. It may pay you to do it.

Mr. MARTIN. If this work is done, it is permanent. It is not something that has to be done over again. Once this channel is built, that is, if the Army engineer plans, it will be a permanent remedy of the condition and I think that is an important consideration.

Senator DWORSHAK. Mr. Martin, was this request presented to the House committee?

Mr. MARTIN. Yes, sir; to the House committee.

Senator DWORSHAK. Thank you.

Colonel Gee, I believe you are next.

CENTRAL AND SOUTHERN FLORIDA FLOOD-CONTROL DISTRICT

STATEMENT OF COL. HERBERT C. GEE, CONSULTANT ENGINEER, PALM BEACH, FLA.

BUDGET ESTIMATE

Mr. GEE. Mr. Chairman, my name is Herbert C. Gee. I am a consultant engineer from Palm Beach, Fla., appearing before you to represent the central and southern Florida flood-control district, the agency of the State of Florida responsible for the coordination under the central and southern Florida projects.

The Corps of Engineers and local flood-control district have been cooperating closely in the carrying forward of this project since the start of this construction in January 1950.

We are now in the fourth construction year of the budget, and have made significant progress in accomplishing the first objective of the program, mainly the building of the lower east coast protective levee to afford basic flood protection against the major floods in the Everglades area to the densely populated lower east coast of Florida.

We find that the budget estimate for the project for the fiscal year 1954, now being considered by this committee and by the House committee is in the amount of $800,000.

The amount of money in fiscal year 1954 will simply permit the paying out of those contracts entered into with funds already appropriated, and in addition meeting certain engineering costs in connection with the advance planning of this project.

The appropriation would not permit the start of any new elements of this authorized project.

UNEXPENDED FUNDS

Senator ELLENDER. Do you know whether there are unexpended funds, Colonel?

Mr. GEE. I am advised that the approximate amount of unexpended money at the end of the fiscal year is $5 million. That is unexpended, but unobligated.

Senator HOLLAND. It is all committed and under contract?

Mr. GEE. The contractors will not have earned that amount of money. The appropriation of this small amount of money would place certain important areas within the project in jeopardy for a much longer time than would be necessary if the project were carried forward in accordance with any reasonable schedule of construction.

I would like to point out for the benefit of the committee the trouble spots on the map which would be adversely affected by a slowdown or stoppage of construction.

The red lines on the map indicate levees which have been completed or are under construction and nearing completion.

The areas where we are presently worse off than was the case when the project was begun in 1950 are, first, at 20-mile bend on the West Palm Beach Canal where, in the course of the construction of the barrier levee to protect the east coast, a structure has been built in the West Palm Beach Canal with a capacity of 700 cubic feet per second.

The canal, before the project began, would carry 1,200 cubic feet per second at that point. The additional capacity at this point will be obtained when the major pumping station 5–A is brought into operation.

So we are taking a calculated risk at that point by reducing the capacity of the canal temporarily to achieve regulation of the canal and to permit the routing of a major flood down the L–8 channel and into conservation area No. 1.

I say this is a temporary condition and it also represents one of the calculated risks to be taken in building a project of this type.

HILLSBORO CANAL

A second place where works of similar character have been built is at this point on the Hillsboro Canal, a structure designated as S–39, a gated opening through the major east coast levee, to permit the release of small quantities of water required to support the agricultural economy of this area and to maintain favorable ground water conditions.

With this capacity of 700 cubic feet per second, we find this canal's ability to carry floodwaters out of the agricultural area reduced from 1,100 up to 700 cubic feet per second.

Here, again, this is a temporary condition and will be relieved by the building of pumping station S–6, and by the completion of spillway S–10, which is a spillway designed to permit the transfer of water from conservation area 1, to conservation area 2.

The third point of trouble in the project area resulting from progress of construction to date is at the south end of levee No. 1, the westernmost unit in the protective system for the agricultural area south of Lake Okeechobee.

With levee 1 completed and no further construction undertaken, floods originating in the Devil's Garden area, the Highlands and Hendry Counties, moving generally eastward, will run around the south end of levee 1, find their way into the Bolles Canal, flow eastward and overtax the capacity of the North New River Canal.

Many thousands of acres of developed muck land are in production on that canal. Those developments will be placed in jeopardy by the movement of a major flood eastward along the Bolles Canal and inducing high stages in the North New River Canal.

These are the places where we can foresee that trouble will be caused by the portions of the project built to date.

Therefore, we urge that the project be continued at a reasonable rate of construction in order that the time during which the people along the West Palm Beach Canal, the Hillsboro Canal, and the North New River Canal are exposed to these conditions may be reduced to the absolute minimum. Certainly, under no condition, should the project be permitted to come to a stop leaving those important areas of developed land in worse condition than was the case before this Federal project was ever begun.

PARTICIPATION BY STATE

I would like to leave with the committee a statement of the financial participation by the State of Florida in this project, since the project

was begun. I have a report of receipts and expenditures of the flood-control district showing the district has received, to date, $8,400,000; has expended in carrying its share of this project $6,884,000, and has cash reserves of $1,546,000.

Senator HOLLAND. Colonel, I wish you would state into the record at this time, because Senator Dworshak was not here this morning, the features of the project which require contribution from the State of Florida and the amount of the total investment that is required from the State and local contributors.

Mr. GEE. The contribution from the State of Florida is made up of a 15-percent cash contribution to the cost of construction, in a total amount not to exceed $25,152,000.

In addition, lands and rights-of-way are to be furnished by the State. In addition, all relocation made necessary by the construction, gentlemen, is to be carried out at State expense. Finally, the State is to take over the completed works for maintenance and operation, and during the course of this entire construction program, the State is required to hold and save the United States against damage arising from the construction.

All of these activities, together, account for 39 percent of the total economic cost of this project.

STORAGE AREAS

Senator HOLLAND. I wish you would point out to this committee the three large storage areas which have been acquired.

Mr. GEE. All of the lands included within these lines on the map are to be set aside under this program as a conservation area for the storage of fresh water.

The area includes 852,000 acres which has been acquired by the State of Florida as one of the requirements under the program.

The last tracts are in condemnation suits at the present time and will be in State ownership in a matter of months.

The first of these areas is located in Palm Beach County, and in addition to serving as a storage area for fresh water is now being developed as a fish and game refuge by the United States Fish and Wildlife Service.

All of the area is the wild saw-grass land of the Everglades, found to be unsuitable for long-term agricultural use, and, consequently, dedicated as a storage basin for fresh water to serve the dual purpose of furnishing a source of irrigation water for all the agricultural activity along the lower east coast, and, in addition, recharging ground waters in the entire southern end of the peninsula where domestic water supply and a large percentage of the water required for agriculture and industry is drawn from a very porous limestone formation which is right at the surface of the ground, from about this line on the map southward on the Florida peninsula.

WATER SUPPLY FOR KEY WEST AND MIAMI

That includes also the water supply for all of the Armed Forces activities at Key West and the civilian activities at Key West, drawn from a series of shallow wells, located at Florida City, a short dis-

tance south of Homestead, and then transported in a high pressure aqueduct to Key West.

Senator HOLLAND. Including the water supply for the city of Miami and the adjoining and nearby cities?

Mr. GEE. It includes all the domestic water supply in the area shown on this map, except Palm Beach and West Palm Beach; that is the only surface collecting area in Florida.

Recently, there was a meeting in July of 1952, and they agreed on a construction program for this project which would carry it forward at a reasonable rate, believed to be within the financial capabilities of the State and Federal Government to finance.

10-YEAR PROGRAM

We agreed upon this 10-year program. The budget presentation of the State flood-control district to the State legislature, which is now in session, was based upon meeting the requirements which would have to be borne by the State reflected in that 10-year program.

We requested three and a quarter million dollars of State funds to finance activities during the coming biennium.

This three and a quarter million dollars has already been appropriated, or I should say has been included in the general appropriation act which has already passed both houses of the legislature, and is an item not in controversy.

Senator HOLLAND. That would be three and a quarter million dollars more than the amount which has already been contributed?

Mr. GEE. Yes, sir; that is correct.

In addition the local district raises money by taxation within the 17-county area which comprises the district by a levy of not to exceed 1 mill on all property on the books of the county. The proceeds of a 1-mill levy this year amount to $1,420,000 in this district. The full mill was levied last year and will be levied in the coming year.

PERCENT COMPLETED

Senator DWORSHAK. What percentage of this entire project is now completed?

Mr. GEE. Of the authorized first phase, the engineers will correct me on this, it is approximately 20 percent, sir.

One of the principal objectives of this program was to afford basic flood protection to the lower east coast where damage was concentrated in 1947. That was essentially accomplished by the building of this 123-mile system of levees. We have a start now on the inner circle. That will be the encirclement of the agricultural area to protect this developed muck land south of Lake Okeechobee, where in 1947 we had 161,000 acres under cultivation, and in 1952 we had 301,000 acres under cultivation in that same area.

The governing board of the flood-control district requested that I present their recommendations to the committee with respect to the appropriation of funds for the fiscal year 1954. It is requested that an appropriation of $4,012,000 be made for construction during fiscal 1954, and that in addition approximately $1 million be made available to the Corps of Engineers to continue engineering work on this project in the area shown on the map, as well as the basins of the

Kissimmee River and St. Johns River, which constitutes the northern half of the flood-control district.

This would make a total appropriation of $5 million for the fiscal year 1954, and the individual items to be included in the list for construction in that year would be L-15 and 14. These are the units on the Hillsboro Canal within the limits of the agricultural area.

Work would be on deepening and widening that canal to provide greater capacity for the relief of flooding in the agricultural area; L–12, which is a part of the West Palm Beach Canal, just west of 20-Mile Bend; L–19 and L–20 on the North New River Canal to afford greater relief from flooding for the developed lands adjoining that canal and near the border of the lake.

CONSTRUCTION OF PUMPING STATION

In addition, to start the construction on pumping stations, S–6 and S–2, and the machinery for S–3, all of these units of construction designed to bring about positive protection to the large investment in developed lands located around the south rim of Lake Okeechobee.

If there are questions concerning the project, Mr. Chairman, I will be glad to attempt to answer them at this time.

Senator DWORSHAK. Do you have any questions, Senator?

Senator HOLLAND. Not at this point.

Senator DWORSHAK. Do you have any comments to add?

Senator HOLLAND. Well, I wish to sum up after he gets through. That was the understanding we had this morning.

Senator DWORSHAK. Is he the last witness?

Senator HOLLAND. Yes, sir.

Senator DWORSHAK. Senator Holland, you may resume.

STATEMENT OF HON. SPESSARD L. HOLLAND, A UNITED STATES SENATOR FROM THE STATE OF FLORIDA

PREPARED STATEMENT

Senator HOLLAND. Thank you, Mr. Chairman. I will not take a great deal of time because I realize the pressure under which the committee is working.

I ask first that my formal statement on the central and southern Florida flood control project be placed into the record.

Senator DWORSHAK. Without objection, it will be inserted.

(The statement referred to follows:)

STATEMENT OF SENATOR SPESSARD L. HOLLAND ON THE CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL PROJECT

Mr. Chairman, I am grateful for the opportunity to appear before this subcommittee in support of the Bureau of the Budget's recommendation that $800,000 be appropriated for the central and southern Florida flood control project in fiscal year 1954, and also to strongly request that the committee raise the amount, which is woefully inadequate, to $5 million in order to properly continue the important work on this vital project and to keep the project on the schedule which was adopted on July 23, 1952, at a joint meeting of the Corps of Engineers and the Central and Southern Florida Flood Control District.

The committee will recall that the first phase of the project was approved by Congress in the Flood Control Act of 1948. The original estimate of the cost

of the first phase was about $70 million of which the Federal Government would contribute about $58 million. At the same time the Congress approved the project, it also authorized the appropriation of $16,300,000 for initiation and partial completion of the first phase and for the continuation of engineering studies and investigation. The Flood Control Act of 1950 authorized a further appropriation of $20 million in addition to the initial authorization. The approval by the Congress of the first phase was the climax of over 10 years of hard work on the part the Corps of Engineers, officials of the State of Florida, and private citizens who assembled the necessary data. The report of the engineers was printed as House Document 643, 80th Congress. Under the plan of the engineers, the State of Florida must pay 15 percent of the construction cost plus cost of lands, easements, rights-of-way, maintenance and operation of the completed works, and must also secure the United States against claims for damage arising from construction and operation of the works. These requirements of local cooperation mean in effect that the State of Florida is bearing 39 percent of the total economic cost and the Federal Government 61 percent.

The Corps of Engineers advises that the first phase of the project provides the unusually high benefit-to-cost ratio of 4.03 to 1.

The plan as a whole embraces about 15,570 square miles in central and southern Florida. This area includes all, or a portion of, 17 counties in the southern part of Florida, and contains more than one-third of Florida's population. This area produces the bulk of our winter vegetable crops and sugarcane and much of our citrus and cattle. The area played a vital role in the production of such food commodities in World War II, and it is doing the same in the current emergency. The highly developed agricultural, winter resort, and industrial area along the lower east coast of Florida is vitally affected by this plan and is a part of it. Also included in this area is the Marine Air Station at Opa Locka, Fla., and several inactive bases which may be used in the current emergency.

This project will greatly reduce flood damage, conserve water during droughts, recharge the ground-water supply, resist further salt-water intrusion, and help to eliminate the burning of muck lands during drought periods. Congressional approval of the project came too late in 1948 to obtain a Federal appropriation; therefore, in order to get the necessary planning work under way without delay, the State of Florida, with several local agencies, advanced $120,000 for this work. Also the State of Florida in carrying out its responsibility in connection with this plan, since the passage of the Flood Control Act of 1948, has appropriated a total amount of $6,128,125. This appropriation covers the sums appropriated at two biennial sessions of the State legislature in 1949 and 1951. In addition, there has been raised by local taxation within the district the sum of $3,261,685 for use on this project. Furthermore, both Houses of the Florida Legislature have recently passed a new biennial appropriation bill which includes the further sum of $3,250,000 for this project. This figure was arrived at on the basis of the 10-year program agreed upon by the Central and Southern Florida Flood Control District and the Corps of Engineers. The appropriation bill is now in conference, but the amount specified for this project is not in controversy. Local authorities have planned their biennial budget relying in good faith on the agreed 10-year program, and we feel that every effort should be made by the Federal Government to fulfill its obligations and permit an orderly development of this project. The Central and Southern Florida Flood Control District has expended a total of $6,884,673 of State and local funds on the project and to date, the Federal Government has appropriated $18,800,000 for the project.

Mr. Chairman, we are still dealing with the first phase of this project, which consists principally of the imperative lifesaving and property-saving work. About 2,500 lives were lost through floods in this area in 1926 and 1928. It is estimated that direct crop and property damage caused by hurricanes and floods in this area in 1947 and 1948 alone amounts to $75,213,700.

The Corps of Engineers advises that if the first phase of the project had been completed prior to 1947, it would have prevented about 50 percent or $25,100,000 of the damages suffered in 1947 in the east coast Everglades-Okeechobee area. Also, the engineers estimate that the entire plan of improvement will produce benefits from flood damages prevented, land use, and preservation of fish and wildlife at $24,500,000 annually.

Mr. Chairman, the first construction on this project started in January 1950 and since that date we have made great progress because of the appropriations by the Congress and the State of Florida and the flood-control district, and the cooperative efforts of the Corps of Engineers, and the officials of the Central and Southern Florida Flood Control District. At the present time there has

been constructed a continuous line of levees extending from the east shore of Lake Okeechobee, at a point 6 miles north of Canal Point, to a point 10.5 miles south of the Tamiami Trail southwest of Miami. The total length of this levee system is about 120 miles. All of these levees have been completed except that on the east side of the conservation areas the levees have not been constructed to their final grade, but are built to an interim grade sufficient to give complete flood protection under present conditions and they will be raised when water is stored in these areas.

The State of Florida to date has more than met its proportionate share of the cost of the project. The State, its citizens, and the Federal Government already have heavy investments in flood-control projects in our State. The levee around a portion of Lake Okeechobee was constructed by the Corps of Engineers and is still under their jurisdiction. It was built at a cost of $20 million after the terrible disasters suffered in that area in 1926 and 1928, when so many lives were lost. In addition, the State of Florida, directly and through drainage districts, has spent over $29 million, and private citizens have spent additional millions.

The central and southern Florida project incorporates, within the system of major works to be provided, all of the works of the Everglades Drainage District which were completed prior to the authorization of this project and entirely with State and district funds. The actual cost of these improvements, paid for entirely by local interests, was approximately $18 million. This large contribution, in the form of completed works, is accepted as a part of the project but local interests are given no credit in the project cost distribution for this large expenditure of funds. In addition, approximately $16 million had been invested by private landowners in the water-control facilities. In other words, at the time the Central and Southern Florida Flood Control District was authorized in 1948, local interests had already spent in the Everglades Agricultural area $34 million on flood control and water conservation.

Since the start of construction in January of 1950, the flood-control district has spent a considerable amount of money for acquisition of rights of way. The costs to date have been 244 percent of the Corps of Engineers' estimate for these rights-of-way included in House Document 643. During the same period, the flood-control district has engaged in certain relocation works. For the projects already completed, the cost experience shows these items to amount to 156 percent of the original engineers' estimate. The project has developed to the point where major works within the agricultural area south and southeast of Lake Okeechobee are now being initiated. In this area, relocation costs may be expected to increase sharply as compared with the cost experience to date along the lower east coast.

House Document 643 includes an estimate of right-of-way costs for the authorized first phase in the amount of $2,376,290. The estimated cost of relocations for this authorized work is $1,221,950. Assuming that the cost experience continues to bear the same relation to original estimates, as has been the case to date, the total estimated cost of rights of way for the first phase will be $5,798,147. Similarly, the relocation cost is estimated to be $1,906,242, or a total of $7,704,389, for rights of way and relocations alone. In addition, $1,300,892 has been spent for acquisition of lands within the conservation area. Pending condemnation suits for additional tracts will require the expenditure of approximately $300,000 to round out the acquisition of these large water-storage areas. Thus, the total estimate of cost for land acquisition, rights of way, and relocations under the first phase becomes $9,305,281, or 258 percent of the Corps of Engineers' 1947 estimate.

While this increase in the estimated cost of rights of way and relocation under the project will be incurred by local interests, the Federal Government costs have increased an estimated 40 percent, based upon the latest estimates submitted by the Corps of Engineers. Local interests will, of course, pay 15 percent of the actual cost of construction under the authorized first phase.

Even after this Federal-State cooperative program is completed, the drainage district and individual landowners must provide their own water-control works before they can realize the full benefit of this program. It is estimated that this cost to private landowners will exceed the combined Federal-State expenditures by a ratio of at least 2 to 1.

We have made progress, but recent disasters such as were experienced in 1947, 1948, and 1949 point out clearly the urgent need to complete the overall comprehensive plan and anything less than that will not protect the southern and central part of our State.

In order to progress properly with this project, it is essential that the following specific items be provided for in fiscal year 1954 in the amounts indicated:

L–15	$740,000	S–6	(structure)	245,000
L–14	408,000	S–2	(machinery)	370,000
L–12	462,000	S–2	(structure)	171,000
L–19	673,000	S–3	(machinery)	190,000
L–20	53,000			
S–6	(machinery) 700,000		Total	4,012,000

(NOTE.—These amounts are actual contractors' earnings and not total contract amounts.)

In addition to these expenditures for actual construction, we recommend that the appropriation be increased to $5 million to provide approximately $1 million for the further advancement of engineering planning on the overall project to enable the Corps of Engineers to keep the project on schedule, in the future, by getting engineering well advanced during fiscal year 1954.

The long line of levees and structures on the east side of the project are most helpful to the population of the lower east coast of Florida, but it is obvious that they have increased the danger of flood west of the levees. This area will not only get its usual amount of floodwaters, but a greater amount, because the levees on the east now prevent the natural drainage of floodwaters. Actually, by addition of these levees and structures the danger of flood along certain of the major canals has been increased, and we should move as rapidly as possible to remove this temporary threat by completing the entire project at the earliest possible date.

Florida is one of the fastest-growing States in the Union. According to the 1950 census the population of Florida was 2,771,305, which entitled the State to 2 additional Representatives in the United States Congress. The estimated population as of July 1, 1952, was 3,100,000, or an increase of 328,695 in a little more than 2 years. Much of this new growth is in the area covered by this project. The people of Florida are behind the project and have demonstrated their interest by action in meeting their obligations in regard to the project well ahead of schedule. I believe that it is the duty and obligation of the Federal Government to continue to live up to its part of the project and provide the necessary Federal funds to move the work along in an orderly and economical manner.

AREA INVOLVED

Senator HOLLAND. With reference to that statement, I ask that the distinguished chairman look at the map which is before him. He will note a dotted line which surrounds the whole of the central and southern Florida flood-control district. From that he will note that the works shown in red, which are completed or under construction, and those shown in green, which are already authorized and needed badly and shall continue under construction, all lie in a comparatively small southeastern part of the larger area.

The whole area comprises some 17 counties in southeast Florida.

You see, the district includes all of the areas that I am indicating now [indicating]. The first phase was deliberately placed in the area where the works have been constructed and are planned for construction this year and in the immediate future because that was where the major part of the tremendous damage was sustained in 1947, 1948, and 1950.

1947 DAMAGE

In 1947 the damage was about $57 million. Most of that was in the areas where people live and where it is heavily developed. The structures that have already been built, this 123 miles of levees, do bring very great protection to the built-up areas which lie along the east coast. Those structures are either now completed or are continuing

under construction as, for instance, L–7, and these lateral canals in the southeasterly portion, and will be completed during the approaching year.

I do not want the committee to be under the impression that this $5 million on hand at the end of this year is not committed. To the contrary, the contracts are under way. The one remaining contract, I believe, is to be let and under way before the end of this fiscal year.

The result of making practically no appropriation for this year, as the Budget Bureau has suggested, cutting the request of the engineers from $5 million to $800,000, would mean that this project would gradually peter out at the end of this coming fiscal year, at a time when you have not even begun to reach all that portion of the area which has very critical problems, although they are not so critical as the problems embraced in phase 1.

These people in the other counties, north and northeast, and northwest, of the area where the construction is going on, have been paying their special millage taxes, and the State government has been paying about three and a quarter million every biennium; that comes out of the pockets of the citizens of the whole State.

It would be a most disappointing and, I say, an unfair thing, to have the people in the northern part of the district feel there is not to be any planning money made available for that part of the project which will reach them in the next phase of the program.

I think, too, that it would be exceedingly unfair to the people in this very highly developed area south of Lake Okeechobee, who will feel that instead of being helped by the construction, which has helped so greatly the folks who live along the coast, they have actually been hurt, and that their prospect of enhanced damage is being protracted over the years by the failure to move ahead now with the completion of those portions of the authorized first phase as just outlined by Colonel Gee, which do give them protection.

As it is now, there is no doubt at all that under flood conditions they would be subjected to more damage than if nothing had been built.

WINTER VEGETABLE SOURCE

I call to the attention of the committee the fact that the winter vegetable basket of the Nation, south, southeast, and southwest of the lake, is in the area which is now about to be protected if construction goes ahead.

Colonel Gee stated that there was something over 300,000 acres under cultivation and under high production in that area. I do not have to tell this committee that there is where our winter beans, our winter vegetables of various kinds, and many other products, for instance practically all of the Florida sugar and much of the Florida cattle, are produced. It is a tremendously productive area which, by the way, is a very heavy taxpaying area to the Federal Government.

We have felt that it is a rather shocking thing for the Budget Bureau, to, in effect, suggest that we will have a moratorium on construction at the end of this next year, leaving some people more badly affected than they were before we started.

POPULATION INVOLVED

When I say some people, there are between 25,000 and 40,000 people who actually live in this highly developed area around the lake, and in the height of the vegetable season I do not know how many agricultural workers you will have in there in addition to the normal population. Perhaps it will be 12,000 to 15,000. They have numerous villages built up for the migrant labor, as you gentlemen know who have been there.

So to, in effect, stop the project in that way would be a tragedy to the people in that vegetable area. It would be completely unfair to the people in the rest of the central and southern Florida flood-control district. I think it would be most shortsighted in that we would forget the fact that when you have an immense production there, it contributes heavily to taxation, that that tax source is dried up when the production is drowned out. That is exactly what will occur.

The salient facts are more fully set forth in my formal statement. But I did want this additional statement to be made because I think it is completely necessary to move ahead with the construction under a program not only approved by Congress, but on which the Engineers have fixed a progress schedule with the State authorities, and which we are now being asked to forget about and discard, after that progress schedule has been sold to the Legislature of the State of Florida.

STATE CONTRIBUTION

They have made their appropriation of $3¼ million for the next biennium. It just does not smack of the kind of fair dealing which I am sure the Federal Government wants to practice with its people.

I think that is about all that I will say about this project. Now if I may go to the Canaveral Harbor project for a moment.

The Canaveral project is shown on this same map, just south of Cape Canaveral. That harbor lies between Patrick Field, which is several miles—how many miles south is Patrick Field?

Mr. GEE. Six and a half miles.

Senator HOLLAND. The launching base for the guided missiles is at Cape Canaveral, just north. That port is the port from which the crash boats operate. There is no other port until you get to Fort Pierce.

I should say it is 100 miles below there where Fort Pierce is located, and there is not a port any place above Canaveral Harbor until you get to St. Augustine. It is being used daily for not only the crash boats which protect the fliers, but for the boats which clear the area when they have their experiments, as they are having them every few days with guided missiles.

OPERATION OF SUPPLY BOATS

In addition, the supply boats which supply the offshore bases at Eleuthera and San Salvador and other islands in the Bahamas, which lie southeasterly of here, operate out of this port regularly.

I was there last winter and was shocked to find that the currents of the waters there are such that they are blocking the channel, the 27-

foot channel, just about as fast as the engineers' dredges can clear it. The engineers have stated today, earlier, I believe, that it costs about $200,000 a year to keep that clear, and it would be very false economy not to build the jetties which were authorized in the beginning, but which had to be studied from the standpoint of just what kind of jetties were needed because of the unusual currents here, which come down past Canaveral and then whirl backward and make a different kind of a situation than that which exists anywhere else along the east coast of Florida.

JETTY CONSTRUCTION

There is no budget item on this because the engineers did not finish their jetty studies until March. The engineers stated this morning, Senator, when you were not here, that they have already dedicated, with the consent of the budget, $180,000 from their maintenance fund to start the south jetty. They have told me that they could very easily build both jetties in this fiscal year, and this would result in a very material saving if they were able to move and do it.

The idea of withholding a $700,000 appropriation when the keeping clear of the channel is requiring $200,000 or more a year, and when no substantial traffic can be built up there requiring heavy ships because of the present unsafe and unstable situation, disturbs me greatly.

I believe the photographs which were filed this morning, and I hope will be shown to the present chairman of the committee, will show the condition as being the essence of false economy.

It should not be allowed to continue a day longer than is necessary.

For the first time, therefore, I am requesting seriously something that is not budgeted, with the full belief that it is not only sound economy to grant it, but very wise economy.

Here is a picture of the 27-foot channel. This is the way the countercurrent throws the sand back across the entrance. I believe the engineers stated that they can keep the channel open only to a depth of about 16 feet.

Is that right?

Colonel MILNE. That is right.

Senator HOLLAND. It is supposed to be a 27-foot depth. I was told at noon that there were times when this condition is very serious.

Colonel MILNE. That is correct.

GUIDED-MISSILE BASE

Senator HOLLAND. The wharfs or depots that serve the guided-missiles base are on the south side, as you can see, the buildings and tanks and various equipment. We are just allowing the currents to defeat a well-planned project in which the local people have already contributed $1,300,000, much more than the Federal Government, and in which this part of the Federal program has just not been reached.

I am confident that the committee will want to practice real economy concerning this project and will appropriate the necessary funds to do so.

Senator DWORSHAK. I would like to have the Army Engineer Corps insert in the record at this point any justification or comments.

(The information referred to follows:)

CANAVERAL HARBOR, FLA.

The original authorization for improvement at Canaveral Harbor, Fla., included in part "an entrance channel, 25 feet deep, protected by jetties." It was determined that the jetties should not be constructed at the time the entrance channel was dredged, in order that a study of littoral drift, and wave and current action could be made following the opening of the channel to determine more precisely the effect of creating the harbor. After 1 year's experience at the mouth of the entrance channel, the need for the protecting jetties has been borne out as a means of reducing maintenance dredging costs. In order to immediately reduce maintenance dredging costs a portion of the authorized south jetty is to be constructed with maintenance funds as an emergency step. Determination of the need for extension of this jetty and for construction of a protecting jetty on the north side will be reserved until it is dictated by actual experience. Based on experience in the past year, it is indicated that the average annual cost of maintenance without jetties will be about $200,000. A material reduction in this figure will be realized upon completion of the jetty protection at the entrance.

The designs and plans for the jetties which eventually may be required is complete.

Local interests have contributed $940,000 in cash toward construction of the Canaveral Harbor project and have provided lands, easements and bridges at a cost of about $150,000. In addition, local interests have constructed piers and docks, the cost of which is not available in the Office of the Chief of Army Engineers.

NEED FOR JETTY CONSTRUCTION

Senator HOLLAND. They have not asked us to make this presentation. They have gone ahead with the $180,000 to start the jetty. It is my own feeling, and I am positive that I am correct in it, that it will be much better to build the jetties this year. I was told by the engineers during the noon hour that that could be done and that they realize that it would effect greater economies to do so.

About this planning work elsewhere in the flood-control district, just what planning work are you authorized to do under present authorization in central and southern Florida?

AUTHORIZATION

Colonel HIATT. Under the first phase authorized, Senator, we were given specific authority to plan not only for the first-phase area, which is generally in the Everglades, the east coast, Lake Okeechobee, but we were also authorized to plan in the upper Kissimmee and upper St. Johns Rivers Basin, which are part of the overall plan. Those parts are not yet authorized for construction in the northern part of the region, but they are authorized for planning.

JIM WOODRUFF PROJECT

Senator HOLLAND. Now I want to speak about the Jim Woodruff proposition, and ask that a statement I have prepared on this project be placed in the record.

Senator DWORSHAK. Without objection, it will be inserted.

(The statement referred to follows:)

JIM WOODRUFF LOCK AND DAM

Mr. Chairman, the Jim Woodruff lock and dam was authorized by the 1945 and 1946 River and Harbor Acts, and is estimated to cost $46,379,000. I am advised that up to date $31,513,000 has been allotted to this project. The project which is now under construction is located on the Apalachicola River

about 107.6 miles north of the mouth of the river and about 0.2 mile below the confluence of the Chattahoochee and Flint Rivers. The committee may recall that the Congress appropriated $6,300,000 for work on this project for fiscal year 1952 and $10,330,000 for fiscal year 1953. For fiscal year 1954 the Bureau of the Budget recommended for this project $10.4 million under the administration of President Truman, but reduced the amount to $7.9 million in the budget submitted under the administration of President Eisenhower. It is a multiple-purpose project, namely, navigation, hydroelectric power, flood control, water supply, and related benefits. The large reservoir formed by the construction of the dam will extend about 47 miles up the Flint River and about 52 miles up the Chattahoochee River. Also 9-foot navigation channels to both Bainbridge and Columbus, Ga., are included in the plan. The large water reservoir will be accessible and available to a large portion of the population of southern Alabama, southern Georgia, and northern Florida.

This project will provide a large block of power of 30,000 kilowatts in an area where it is urgently needed to aid the national defense program and will add an additional transportation facility which will greatly assist in relieving the transportation problem in time of war. The 9-foot navigation channel to Columbus, Ga., is particularly important for defense, as it will provide water transportation to Fort Benning, Ga., one of the largest military installations in this country.

I understand that the funds requested for fiscal year 1954 will be used for construction work on the spillway, completing construction of the dam, clearing the reservoir, and purchasing power equipment.

I also understand that the project by the end of fiscal year 1953 will be about two-thirds complete, and approximately 85 percent complete by the end of fiscal year 1954. It is expected that the entire project will be completed by February of 1955.

Mr. Chairman, we are proud of this multiple-purpose project, but I point out to the committe that it is not a 1-State project, but a minimum of 3 States (Florida, Georgia, and Alabama). Of course, the whole Southeast and the Nation will benefit by its early completion. The requested funds are needed in order to continue the work as planned in an orderly and economical manner. The hydroelectric and navigation features of the project are vitally needed during the current emergency.

AMOUNT REQUIRED

Senator HOLLAND. I stated in the beginning this morning, that I had understood that the engineers could get along with the $7,900,000 remaining after the original budget had been cut from $10,400,000 because I understood they were working toward a closing date that is near at hand. We are right at the end of that big project.

During the hearing this morning, it was brought out that the engineers would feel more comfortable, if I may quote them, and they are here now, if they had a million extra added, and would then be in a position, so far as they can give assurance, to say that power production will begin the latter part of next year, 1954.

Colonel HIATT. That is correct, Senator.

Senator HOLLAND. I wanted the record to show very clearly if that $1 million will give us that assurance of finishing that huge project, which means a great deal to the Nation, and which now is nearing completion, we would feel that it was pennywise and pound foolish to withhold that million.

I will close by saying that as far as Florida is concerned it is willing to make its contribution to economy. If the engineers can get along with the $7,900,000 rather than the $10,400,000, that is all right. If the engineers can get along with less than the $5 million that they say is the minimum to go ahead in the regular fashion on the flood-control district, we say that is all right.

CONTRIBUTION TO ECONOMY EFFORT

We wish to call attention to the fact that two of the projects that we received contributions for last year do not appear in the budget at all, and we are not asking for anything for them. We want to make our contribution to the economy effort. But we do not feel that we should be asked as we are in this current budget, to make a 50-percent contribution out of our budgeted items, especially when they are such critical items, and when we think that they involve such real values not only to us but to the Nation.

We will take our economy share for share with any other part of the Nation, and we are willing and glad to do that.

Senator DWORSHAK. You are primarily interested in continuity?

Senator HOLLAND. We want continuity and we think to hold up that big power project in Jim Woodruff Dam for the lack of a million dollars, when it is nearing completion, is not justified. It shows here it has already had a large amount invested in it, and the engineers for a very small additional amount, could complete the project. But now it has been cut.

When you are right at your last step, it does not look like reasonable economy to slow down for want of a million dollars on a large project of that kind.

Incidentally, that is the only power project which the geography of our State permits us.

Senator DWORSHAK. Thank you, Senator Holland.

Senator HOLLAND. Thank you, Mr. Chairman.

Senator Watkins is our next witness.

STATEMENT OF HON. ARTHUR V. WATKINS, A UNITED STATES SENATOR FROM THE STATE OF UTAH

FLOOD-CONTROL PROTECTION

Senator WATKINS. Mr. Chairman and members of the committee, I wish to state that as far as I can find out there are no funds in the current budget for the State of Utah. There were none there last year except as we came in for emergency relief funds. We participated only in respect to some funds that were used for relief.

Last year we had some of the most disastrous floods Utah has ever experienced. It may seem rather strange to some of you gentlemen from the States where you have so much water and where you have frequent floods to think of a State like Utah, in a desert area, having floods. Sometimes we do have very heavy winter deposits of snow in the higher mountains which come out rather rapidly if we have a warm spring.

That is what happened last wear. We had a warm spring and a heavy snowfall in the mountains. These floods that came down early in the year caused a great deal of damage.

It revealed the need for some flood protection.

We have never before argued very strongly for flood control out in Utah because for the most part, we hope that such projects can be tied in with reclamation projects. On the larger streams that is true. We have a number of short streams, however, where reclamation projects cannot be built to hold back the floodwaters.

For that reason we must have some flood relief funds. Irrespective of the fact that nothing is in the budget, we are here today seeking this flood protection. I am speaking not only for myself, but I am also speaking for Senator Bennett.

PREPARED STATEMENT

Senator DWORSHAK. You may have your statement inserted into the record at this point.

(The statement referred to follows:)

STATEMENT BY UNITED STATES SENATOR ARTHUR V. WATKINS

I wish to urge the inclusion of $20,000 in planning funds for the Spanish Fork project in the State of Utah. This project was authorized under the Flood Control Act of 1946.

I wish also to urge the inclusion of $25,000 in examination and survey funds for the Jordan River project.

There are three authorized flood-control projects on the books for the State of Utah. The largest of these from a financial standpoint is the Jordan River project at Salt Lake City. This project was authorized by the Flood Control Act of July 24, 1946. The total cost of this project was estimated in July 1952 at $1,336,000. Of this overall amount, the cost to the Federal Government would be $1,050,000. Local interests will be called upon to bear the remainder of the total cost, namely $286,000. Construction funds have not been appropriated by Congress for this project and none are requested for that purpose in the present budget.

The second largest flood-control project in the State of Utah from a financial standpoint is the Little Valley Wash project at Magna, Utah. This project was authorized by the Flood Control Act of July 24, 1946, and involves an estimated overall cost of $662,000. Of this amount, $635,000 would be borne by the Federal Government and $27,000 by local interests. To this date construction funds have not been appropriated by Congress for this project and none are requested for that purpose in the present budget.

The smallest of the authorized flood control projects for the State of Utah from a financial standpoint is the Spanish Fork project. This project, like the other two authorized projects in the State of Utah, was authorized by the Flood Control Act of July 24, 1946. The total cost of the Spanish Fork project was estimated in July 1952 at $271,000. Of this amount, $205,000 would be allocated to the Federal Government and $66,000 would be borne by local interests. To this date, construction funds have not been appropriated for the Spanish Fork project and no such funds are contained in the budget request now before the committee.

I am not here today to request the inclusion of construction funds in the 1954 appropriations for the Jordan River project. The Chief of Engineers has advised me that according to latest reports available to him, local interests are not currently interested in proceeding with construction of this authorized project.

The Chief of Engineers also advised me that local interests in Utah have indicated that no high priority should be attached to the Little Valley Wash project. On the basis of these assurances, I am not making any appeal for funds for that project.

The Chief of Engineers advises me, however, that there is strong local support for the Spanish Fork project and I am personally aware of the urgent need for this project. The Chief of Engineers says that his organization could use about $20,000 in planning funds in respect to this project during the fiscal year 1954, providing such funds are made available by the Congress.

I urge therefore that the committee include in the 1954 appropriation, $20,000 in planning funds for the Spanish Fork project in the State of Utah.

The plan of improvement which has been adopted by the Corps of Engineers provides for the control of floods on the Spanish Fork River by improving the river channel and constructing levees for a distance of about 6.7 miles from the mouth of the river at Utah Lake upstream to the county highway bridge west of the town of Spanish Fork. In addition, the plan calls for improving about 2 miles of the channel at critical points through a reach of about 6.3 miles upstream from

the County Highway Bridge. The project would also require modification of two diversion dams, revision of bridge and road facilities, and construction of necessary protective works at bridge abutments and piers within the limits of the planned improvements. This project when completed will provide substantial flood protection for 2,250 acres of improved land and it will prevent damages estimated at $600,000 if a major flood again occurs in that area.

I have personally visited the Spanish Fork area and have seen the damage caused by last year's disastrous floods. An emergency river-cleaning project has been completed for which the local community is most thankful. This does not, however, solve the flood problem, and it is extremely important that remedial work of a permanent nature be undertaken and completed as soon as possible. I strongly urge that $20,000 in planning funds for the year 1954 be granted the Chief of Engineers in order that he may proceed with the plans for the improvement work which must be done on the Spanish Fork River in Utah.

FLOOD CONTROL INVESTIGATIONS

A number of flood-control investigations in the State of Utah have been authorized by Congress for prosecution by the Corps of Engineers. These investigations cover the Weber River area, the Sevier River area, the Virgin River area, the Kanab Creek area, the Colorado River area above Lee Ferry, and the Jordan River.

The Chief of Engineers advises me that an interim report on the Jordan River Basin project which was authorized in the 1938 Flood Control Act has an estimated completion date in 1954. The estimated overall cost of this interim report is $75,000—of which $10,000 has been provided to date. The Chief of Engineers is in a position to move ahead on this interim report and could advance it to approximately 45 percent of completion by the end of the next fiscal year if funds could be made available for that purpose in the appropriation now being considered. The Chief of Engineers advises me that $25,000 could be profitably expended if it were made available by the Congress. I strongly urge therefore that the committee include in the 1954 appropriation the sum of $25,000 for use by the Army engineers in furthering the work on the interim report on tthe Jordan River Basin project. This project is of vital importance to Salt Lake City and its neighboring communities. It will provide complete flood protection to those parts of Salt Lake City and nearby areas that are adjacent to the Jordan River which area suffered severe damage in the spring of 1952. It will prevent damages estimated at $550,000 if another flood were to occur in this area. It is vitally important therefore that work on the interim examination and survey report on this project continue during the fiscal year 1954 and it is for that reason that I urge the inclusion of $25,000 for this item in the civil functions examination and survey program.

I want it plainly understood that I am not asking for flood control construction funds for the State of Utah. I am asking only for the inclusion of $20,000 in planning funds for the Spanish Fork project and $25,000 in examination and survey funds for the Jordan River Basin project. These two projects are urgently needed in my State and it is absolutely essential that planning and survey work be continued on these projects during the fiscal year of 1954. The two items which I have requested for inclusion in the 1954 Appropriation Act total $45,000 and are relatively insignificant in relation to the overall total of the appropriation which will be stated in terms of hundreds of millions of dollars.

By way of conclusion, I wish to suggest that the amount of $600,000 which has been included in the estimates for emergency flood control work be left undistributed by the committee. I have a feeling that it would be the most short-sighted kind of economy for the committee to refuse to make this amount available to the Army engineers for emergency purposes in the fiscal year 1954. These funds are generally used for emergency snagging and clearing work throughout the United States.

My colleague, the junior Senator from the State of Utah, Mr. Bennett, joins in this statement.

AUTHORIZATION

Senator DWORSHAK. Do you care to read your statement?

Senator WATKINS. Not necessarily, provided it is included in the record. I want to get clear that we are now urging the inclusion of

this $20,000 in planning funds for the Spanish Fork project in Utah.

This project was authorized back in 1946. It is in my home county. I have been over the project. I saw the damage last year and it was very extensive, considering the size of the stream and the area. It was an extensive bit of damage.

Then we also wish the inclusion of $25,000, examination and survey funds, for the Jordan River project. This survey was authorized in 1938. No money has been spent on construction. In fact, no money has been spent on construction on either one of these projects.

The people in the Spanish Fork area are now ready to go forward. The farmers there are ready to put up their contribution. The other people involved in the other Utah projects are not at this moment urging construction funds, although the projects have been approved.

AMOUNTS REQUESTED

We are asking for these 2 sums, $20,000 and $25,000, respectively, for the 2 purposes that I have mentioned. We feel that under the circumstances and notwithstanding the fact that they were not included in the budget, this committee ought to see that such funds are put into the bill.

Colonel Hiatt is here, and I think he can tell this committee about these two projects. I would like to have him make a statement.

Senator DWORSHAK. Do you have any brief comments, Colonel Hiatt, on this subject?

BENEFIT-COST RATIO

Colonel HIATT. Yes, sir, Mr. Chairman. The Spanish Fork project is a small, local protection project, as Senator Watkins has said. It has a very favorable benefit-cost ratio, being 2.3 to 1.

There have been no funds made available for that project so far. It would be desirable to undertake planning for the project in order to lead to construction.

About $20,000 would take care of that problem, sir. That is, that would take care of the planning.

Senator DWORSHAK. How about the Jordan River project?

Colonel HIATT. The Jordan River survey has been an outstanding program, and an authorized survey in our program, for many years. The recent floods have concentrated attention of the local interests on that particular problem, and the corps, of course, would be pleased to prosecute that survey if we are so directed.

Senator DWORSHAK. Thank you.

Senator WATKINS. I understand the colonel is making this statement at my request. I know how budgets are made up and that sort of thing. He had nothing to do with the actual making of the budget. But in spite of budget-makers, we think this money ought to be forthcoming because there is a positive need for it and it is a very modest sum.

It will be very poor economy not to provide such funds. If we were to have extensive damage again, and the engineers would have to come and help out with the hundreds of thousands of dollars in contributions.

Senator DWORSHAK. Thank you, Senator Watkins.
Senator Johnson, do you wish to testify at this time?
Senator JOHNSON. Yes, Mr. Chairman.

GULF INTERCOASTAL WATERWAYS CHANNEL

STATEMENT OF HON. LYNDON B. JOHNSON, A UNITED STATES SENATOR FROM THE STATE OF TEXAS

Senator JOHNSON. Mr. Chairman, Mr. Richard Furman, representing the Navigation Commission of Victoria County, Tex., was scheduled to appear before your committee this morning in behalf of the Gulf Intracoastal Waterways Channel to Victoria, Tex. He has called me long distance to explain that unforeseen circumstances prevent his being here. Accordingly, he has asked me that I present his statement. I would appreciate it if the statement be received by the committee and incorporated in the record of the hearings, and that it be read by the members and given earnest and sympathetic consideration.

Particularly, I would like to emphasize the conclusion of the statement which is that by reason of the location of three important industries in the Victoria area which will need water transportation, the Federal taxes derived from these new payrolls will amount to more than $2 million annually which, as Mr. Furman suggests, within 3 or 4 years will pay for the Government's participation in this important intracoastal canal extension. This project has been authorized by Congress and provides for a channel 9 feet deep and 100 feet wide, extending from the Gulf Intracoastal Waterway to the vicinity of Victoria. The plan calls for a sea level canal from Gulf Intracoastal Waterway to and including a turning basin about 5½ miles below Victoria.

ESTIMATED COST

The estimated initial cost of this work is $10,970,000, including $4,487,000 to be expended by local interests. Planning on this project has been completed and initiation of construction depends upon the appropriation of funds by Congress, and I commend the project to your favorable consideration and will appreciate your inclusion of Mr. Furman's statement in the printed record of your hearings.

Senator DWORSHAK. Without objection Mr. Furman's statement will be placed in the record.

(The statement referred to follows:)

STATEMENT OF RICHARD FURMAN, SPECIAL REPRESENTATIVE VICTORIA COUNTY NAVIGATION COMMISSION, VICTORIA, TEX.

GULF INTRA-COASTAL WATERWAYS CHANNEL TO VICTORIA, TEX.

Texas history tells us that in 1840 the city council of Victoria was granted congressional authority to clear out the Guadalupe River, including a raft a few miles below, and collect tolls. The following spring the steamer *Swan* navigated the Guadalupe up to Victoria. Because of the hazard of navigation and the lack of traffic at that time, the project was a failure as a transportation medium. In 1907, by authority of the Rivers and Harbors Act of March 2, 1907, the Federal Government dredged a channel in San Antonio Bay 5 feet deep by 40 feet

wide, removed snags, log rafts, and shoals between the mouth of the Guadalupe River and Victoria, a total length of 68 miles. The construction was completed in 1909, but the maintenance of the project was abandoned in 1916 due to the lack of traffic and high maintenance costs. By the approval of the Rivers and Harbors Act of March 2, 1945, the existing project was modified to provide a channel 9 feet deep by 100 feet wide from a connection with the Intra-Coastal Canal approximately 138 miles west of Galveston, Tex., along the east shore of San Antonio, Guadalupe, and Mission Bays and the Guadalupe River to a point 3 miles above Victoria, Tex. Three years ago the proposed turning basin site was changed from its original site 3 miles above Victoria to a point 6 miles below Victoria, saving the Federal Government 9 miles of dredging, the cost of construction and operation of 2 locks, and the cost of a diversion channel to the Guadalupe River, making the project a sea level canal. Local interests were relieved of the expense of 9 miles of rights-of-way, the cost of 2 bridges, and the necessity of requesting authority from the State board of water engineers to divert water from the Guadalupe River to the canal for navigation purposes. It was felt that all available water should be saved for industry rather than for navigation. Early in 1947 two navigation districts, the West Side Calhoun County and the Victoria County Navigation Districts, through which the proposed canal will extend, were created; bonds were issued; and navigation commissions established to handle the affairs of the districts. Since 1948 the Corps of Engineers have repeatedly requested construction funds for the project. The project report has been completed.

This is the fifth consecutive year I have appeared before you in behalf of the Guadalupe River Channel to Victoria, Tex., which was officially made an integral part of the Gulf Intracoastal Waterway last year by Public Law 527, 82d Congress, H. R. 6812, approved July 12, 1952. In 1948 when I presented our brief and first formal request for construction funds with which to start the project, I told you that big industry was anxious to come in to the Victoria area because of our strategic location in the heart of the new industrial frontier. Our section of the Texas Gulf coast has an unlimited supply of natural gas, an adequate supply of water for industry, an unlimited supply of sand and gravel, a very favorable labor situation, and a climate which permits year-round operation.

In 1949 the Du Pont Co. purchased some 1,700 acres of land on the proposed canal extension about 8 miles below the city of Victoria. In 1951 they completed a $50 million plant, where they are now employing 650 people and are making adiponitrile, an ingredient of nylon salts. This adiponitrile is shipped to their plant at Orange, Tex., made into nylon salts and shipped east to their plants, there to be made into nylon.

Last October the Carbide & Carbon Chemicals Co., a subsidiary of the Union Carbide Co., started a $75 million plant on 1,500 acres of land which they purchased on our proposed canal extension about 25 miles below Victoria. Last May Mr. L. J. Bowditch, vice president of the Carbide & Carbon Chemicals Co., appeared with me before the Senate subcommittee and testified that the final decision on the location of that plant site was based on a fact that our canal extension was an approved project, that the Defense Department wanted the plant built as was evidenced by priorities given them for materials, that their products, which would be plastics and antifreeze, would be beneficial to the war effort, and that they would put at least 140,000 tons of traffic on the canal each year. He testified that the first unit would employ at least 750 people.

Last October the Gifford-Hill-American Company, of Dallas, Tex., and California, started construction on a plant at Victoria, and I quote a letter, dated November 13, 1952, from Ray A. Foley, president of Gifford-Hill-American, Inc., to Col. J. D. Lang, district engineer, Galveston district, Corps of United States Engineers:

"Late in October of this year we initiated construction of a manufacturing plant located in the extreme southwest corner of the Victoria County Airport property. This location is but a short distance from the turning basin which will serve the proposed extension of the intracoastal canal to Victoria, Tex. One of the principal contributing factors which influenced our final decision in respect to the location of a site for our aforementioned new plant, was information given us to the effect that the Congress of the United States had promised to build this canal extension into Victoria and as promptly as possible would appropriate funds toward this end. The above plant will primarily serve the coastal area of Texas; however, there is in evidence substantial potential business in respect to serving a number of Latin American countries. In order to

economically serve the development of such trade relationships, we, of course, will have to have an outlet to deep water which again brings up the necessity for the planned extension into Victoria of the intracoastal canal. This new plant, when finally completed in all of its planned aspects, will be equipped to manufacture concrete pressure pipe in a wide range of sizes and designs. The enclosed brochure will serve to briefly describe in word and picture, the types of concrete pressure pipe which we are equipped to manufacture. It is difficult at this time, to even estimate the probable tonnage which might prove economical to ship via the intracoastal canal or deep water; however, such possibilities could, in the not too distant future, particularly in respect to trade with Latin America, reach a volume amounting to several thousand tons annually. The plant when completed will employ approximately 200 men.

"We sincerely trust that you will be able to bring this much needed improvement to the point of actual accomplishment in the very near future.

"Yours very truly,

"GIFFORD-HILL-AMERICAN, INC.
"RAY A. FOLEY, *President*."

These three important industries mentioned above selected the Victoria area because they needed water transportation and were convinced that the canal project would be carried through to completion. These three plants have created new jobs for more than 1,600 people with a combined payroll of more than $10 million annually. The Federal taxes from these new payrolls will amount to more than $2 million annually, which, within 3 or 4 years, will pay for the Government's participation in this important intracoastal canal extension. In addition, the Federal taxes on the net income from the three industries will add a considerable amount each year to the coffers of the United States Treasury. Other industries needing water transportation have indicated a strong desire to come into the Victoria area, which, in turn, will create more Federal taxes. We are asking you to make an investment which will multiply itself many times in returns to the Federal Government.

Senator DWORSHAK. Senator Daniel do you desire to testify at this time?

Senator DANIEL. Yes, Mr. Chairman.

STATEMENT OF HON. PRICE DANIEL, A UNITED STATES SENATOR FROM THE STATE OF TEXAS

GENERAL STATEMENT

Senator DANIEL. Mr. Chairman, I am appearing before the committee to endorse the statement of Mr. Richard Furman, of Victoria, Tex., in support of an appropriation for the construction of the Gulf intracoastal waterways channel to Victoria, Tex. As stated by Senator Johnson, Mr. Furman was unable to appear before the committee. However, this does not detract in any way from the urgent need for the project which he discusses in his statement. I would like to say that I agree with and concur in the statement which Senator Johnson just made.

I personally feel that this is one of the most meritorious of the projects to be constructed in Texas and feel that this subcommittee would be doing a service to the entire country by approving an appropriation for its completion. I refer the committee to the last paragraph contained in Mr. Furman's statement to show that the cost of this project to the Government would be more than repaid in taxes from the payrolls of the companies which have moved to the Victoria area because of the water transportation which would be supplied by this canal project. As the committee will see, other industries have indicated a desire to move into the Victoria area of Texas because of their need

for water transportation. This in turn would create additional taxable payrolls and shows that the requested appropriation is in the form of an investment by the Federal Government which would be repaid manyfold.

Senator DWORSHAK. Senator Clements, do you wish to testify at this time?

Senator CLEMENTS. Yes, Mr. Chairman.

FLOODWALL, MAYSVILLE, KY.

STATEMENT OF EARLE C. CLEMENTS, A UNITED STATES SENATOR FROM THE STATE OF KENTUCKY

GENERAL STATEMENT

Senator CLEMENTS. Mr. Chairman, I am glad to be here with a group from Maysville, along with Congressman Spence.

I take it, before the hearing is over, my colleague, Senator Cooper, will appear.

This group is interested in the appropriation for what may well be the next to the last appropriation that will be needed to complete the flood wall at Maysville.

Maysville, Mr. Chairman, is a beautiful little city of something under 10,000 on the Ohio River. It is one of the finest communities in our State. It has one of the most perfect diversified economies of any community in our State, the economy is about half industry and half agriculture. I might suggest to you that this flood wall will protect all of the industry that is in that area.

I might mention to you that nearly 50 million pounds of tobacco are sold over that market every year. Floods, it seems, occur most often during the tobacco market.

I do not think for a minute that this committee will do anything but recommend the appropriation to the Congress of the needed moneys to complete this next step on the floodwall.

It certainly would be false economy to slow up the building of that floodwall. Congressman Spence, who represents the Maysville district, will make some comments; and, after he does, I want to present to you the folks from Maysville.

Senator DWORSHAK. We will hear from Congressman Spence at this time.

STATEMENT OF HON. BRENT SPENCE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KENTUCKY

COMPLETION OF PROJECTS REQUESTED

Mr. SPENCE. I do not think it is necessary for us to say anything to this committee in regard to these projects, because they have advanced so far and so much money has been expended that the only thing that I would like to say to the committee is the desirability of completing these projects at the earliest possible date.

The Ohio River is an unpredictable river. In the last 90 years we have had 45 major floods, and those floods, rather peculiarly, devas-

tated the town of Maysville and, I may also say, the town of Covington. The town of Covington is not here today, but they are interested to the same extent as the people of Maysville, in order to have the protective works completed at the earliest possible date.

I have a few figures which I think are unnecessary to give you.

ESTIMATED COST

The appropriations received from Maysville are $3,519,800. The estimated cost is $6,312,300. The expenditures to March 30, 1953, are $2,914,800. The completion is set for 1955.

All we ask is that you appropriate the sufficient money to carry this project to completion at the time which is set forth.

Maysville is a splendid town, with splendid citizens; and, as for easement and rights-of-way for these projects, that has already been settled.

They are deeply interested in the early completion of this project. I do not feel that it is necessary to explain further.

You gentlemen have committed yourselves to this point to such an extent that it would certainly be neither good policy nor sound judgment to not complete it as soon as you can.

COVINGTON, KY., PROJECT

I may also say that the city of Covington said that they would have nobody to represent them. The mayor had a death in his family and could not come. The city manager was unable to come. They asked me if I would say a word to this committee.

Of course, I know that is unnecessary, because the Senators are as much interested in these projects as I am. However, in the city of Covington, the appropriations received up to this time have been $5,620,000. The estimated cost is $8,400,000. The expenditures up to March 30, 1953, have been $3,969,700.

Of course, the same arguments that apply to Maysville would also supply to Covington.

Covington is a town of about 70,000, a rich industrial town, just across the river from Cincinnati. It is part of the metropolitan area of Cincinnati. It has been devastated by the floods year after year.

It not only will save the people an immense sum of money but it will save their peace of mind, because they live in constant dread of these floods which have destroyed the value of the property, made slums in parts of the city that have been devastated time and time again, and will restore the city's future and make it a better place to live, where the people will not have the fear of these constant floods if these works are completed.

I have great confidence in the Army engineers. I know they are a fine body of men. What they think they need is what I hope you will give them to carry on these projects.

Senator DWORSHAK. Thank you, Congressman Spence.

Senator CLEMENTS. Mr. Chairman, I would like to join Congressman Spence in what he had to say about the Covington floodwall. I, too, believe that this committee will follow the judgment of the Engineers in allotting the money that is needed to complete the year's work at Covington.

Mr. Chairman, I would like to say one other thing about the little city of Maysville. It has had many achievements. It has shown good judgment in many instances. I call your attention to the good judgment it has shown lately in naming a fine lady as the mayor of their city. I am sure that Senator Cooper will present the lady to you after he makes his statement.

Senator DWORSHAK. Thank you.

Senator Cooper, will you proceed?

STATEMENT OF HON. JOHN SHERMAN COOPER, A UNITED STATES SENATOR FROM THE STATE OF KENTUCKY

MAYSVILLE FLOODWALL

Senator COOPER. Senator Dworshak, Senator Holland, and members of the Appropriations Committee, I want to thank you all for giving me the chance to join with Senator Clements and Congressman Spence in a statement for the Maysville floodwall project.

I know that you have all of the information before you submitted by the Corps of Engineers. I know also that you have heard the testimony of Senator Clements and Congressman Brent Spence, who represents that district. I do want to join them and join the officials and citizens of that city, whom you will soon hear, in a plea for the restoration of the cut for funds for the Maysville floodwall project.

RESTORATION REQUESTED

Senator HOLLAND. Might I ask a question there?

You are asking, then, that the amounts shown in the revised estimate be restored to the amount of the original budget estimate?

Senator COOPER. Yes.

Senator HOLLAND. Or to the amount of the Engineers' original estimate?

Senator COOPER. Yes. As I understand, the cut represents $175,000. Is that correct?

At least the amount which appears in the present budget represents a difference of $175,000 from the amount that was presented in the first budget.

REVISED ESTIMATE

Colonel HIATT. In the original estimate, it was $1,475,000, Mr. Chairman, and in the revised budget the amount was $1,300,000.

Senator DWORSHAK. You want that $175,000 restored, is that it?

Senator COOPER. Yes, sir.

Maysville is a very interesting city. I would like to say that it is one of the oldest cities in the United States. It is historically one of the cities which had the first programs of internal improvements which they proposed and initiated, that which was proposed by Henry Clay of Kentucky; that the first roads leading west centered around Maysville?

It was then, years ago, the subject of interest in the matter of public works. As my colleagues have said, this wall is a part of the great Mississippi and Ohio flood control projects. It is, I understand, 60 percent complete. The need has been established by state-

ments that in the last 50 years there have been 27 occasions on which flood stage has been reached on the Ohio at Maysville.

As Congressman Spence said, if the engineers' estimates are carried out and allowed, this wall can be completed in 1955.

Mayor Hord will tell you what the city has done. It is my understanding that they have voted and sold all the bonds necessary for the completion of this project, and that they are paying interest on these bonds. The amount involved is not too great. I do hope and I do urge that the committee will take into consideration the recommendations of the Corps of Engineers and the city, and that the cut will be restored.

I want to thank you for permitting me to make this brief statement.

Senator HOLLAND (presiding). There is a cut also at Covington, is there not?

Senator COOPER. I would prefer to place in the record a statement concerning the Covington project. For the moment, I want to emphasize, solely, the Maysville project.

Senator CLEMENTS. Senator, I wish to present to you the Mayor of the city of Maysville, Mrs. Rebecca Hord.

CITY OF MAYSVILLE, KY.

STATEMENT OF HON. REBEKAH HORD, MAYOR

MAYSVILLE FLOOD WALL

Mrs. HORD. I am very grateful, I want to say to you gentlemen of the Appropriation Committee, for permitting us this opportunity.

I am certainly grateful to our Congressman and our two Senators for accompanying us.

I have served as the mayor of Maysville only since 1950. Before I make my statement, may I present the members of the citizens' committee for the flood wall, who, through the years since 1946, have given their effort and their energies to securing this flood wall for Maysville.

They have no ax to grind, they have no personal interest, but they saw the need.

The persistence has been very remarkable.

First I wish to present Mr. Bernard Coughlin; the chairman, Mr. J. W. McNeil; Mr. Kenneth Hardyman; and Mr. Thomas Donovan.

Before I make my statement, Mr. Bernard Coughlin should make a statement. I will ask him to come forward and give a prepared statement, and whatever remarks you wish to make. He has made an energetic effort from the beginning and has never missed a session.

Senator HOLLAND. Come forward, please. We will be glad to meet you all.

FLOOD WALL COMMITTEE OF MAYSVILLE, KY.

STATEMENT OF D. BERNARD COUGHLIN, MEMBER

GENERAL STATEMENT

Mr. COUGHLIN. My name is Bernard Coughlin, and I represent the city of Maysville as one of the citizens committee who are interested in the construction of the flood wall.

About the main thing that we have to say is that this flood wall gives protection to a hospital which serves a community down there, and in times of floods, it eliminates about 75 percent of its usefulness.

Also, the floods, when they come, cut the city off from any water supply. We do not have any water supply whatsoever.

As Senator Cooper told you, in the last 50 years we have exceeded the flood stage of 51.6 feet, 27 times. We have the second largest tobacco market in the world.

As Senator Clements told you, there was about 50 million pounds of tobacco on the market during the flood stage last winter, which was sold for approximately $25 million. That represents small crops of numerous farmers in that section.

Of course, during a flood, there have been years when that has been completely lost. So it not only hurt the citizens of the towns, but it hurts the citizens around that area who deliver their tobacco to their market.

We also have a large Carnation Milk plant which receives somewhere in the neighborhood of three-quarters of a million pounds of milk daily. During flood stages, as the farmers are cut off from the plant, that means that there is a daily loss of approximately three-quarters of a million pounds which the farmers must suffer.

The city down there has voted 10 to 1 for the bonds to pay their part of the rights of way and other damages which are necessary in the construction of the flood wall.

I would like to present three copies of this prepared statement. I thank you for giving us an opportunity to be here.

Senator HOLLAND. It will be printed in the record, sir. Thank you.

(The statement referred to follows:)

STATEMENT OF THE REPRESENTATIVES OF THE CITY OF MAYSVILLE, KY.

May It Please Your Honorable Committee:

We appear before you representing the city of Maysville, Ky., requesting an appropriation to continue the building of a flood wall on the Ohio River at Maysville, Ky.

The authority for the local protection project for Maysville, Ky., is the Flood Control Act of 1938, Public No. 761, 75th Congress, 3d session and House Document No. 306, 74th Congress, 1st session; House Committee on Flood Control, Document No. 1, 75th Congress, 1st session; and Report No. 2353, 75th Congress, 3d session.

The project consists of flood walls and levees.

The urgency for the appropriation for the project is apparent for these reasons:

(1) The flood stage at Maysville is 51.6 feet. During the past 40 years that stage has been exceeded by the Ohio River 25 times or on the average of one each 19 months.

(2) It is estimated that the annual loss which the project would prevent and protect us from approximates $250,000.

(3) Maysville's hospital during major floods becomes isolated to more than 75 percent of its potential patients and is practically useless.

(4) The city water pumping station is submerged by all major floods.

(5) The city has many other industries, mercantile establishments and three banks. The floodwaters in 1937 inundated about 1,300 dwellings making 4,300 persons refugees and 189 stores, 11 schools and churches, 2 hotels, 46 industrial buildings, and 1 of its 2 daily newspapers were flooded.

(6) Maysville, long known as a tobacco town, is the second largest burley looseleaf market in the world. At least 50 percent of all these tobacco facilities are located in the flood district and the floods usually occur during the tobacco marketing and processing seasons. More than 2,500 persons in Maysville are

employed in the tobacco industry. This industry affecting farmers, manufacturers, processors and employees is entirely demoralized by the major floods.

(7) Maysville's farming area produces more than 300,000 pounds of milk daily all of which is then lost during these times.

(8) Inside Maysville there is considerable railroad trackage which would be protected.

(9) Maysville voters voted in a ratio to 10 to 1 to issue bonds to pay its part of the cost including rights of way, damage, necessary utilities and sewerage changes. The city's part of the money is now available.

(10) We respectfully refer you to the Chief of Engineer Corps of the War Department for more detailed data which will corroborate the need for the construction of a flood wall and levees at Maysville, Ky.

We wish to thank you for your courtesy in affording us an opportunity to appear before you.

Sincerely,

FLOOD WALL COMMITTEE OF MAYSVILLE, KY.
J. W. MCNEILL, *Chairman.*
D. BERNARD COUGHLIN.
TOM M. DONOVAN.
KENNETH T. HARDYMON.
REBEKAH HORD.

Senator HOLLAND. Senator Clements?

Senator CLEMENTS. Do you have a further statement, Mayor Hord, which you wish to make?

AMOUNT REQUESTED

Mrs. HORD. I have been invited to, and I am a woman.

I am asking you gentlemen for $1,475,000. I think you are entitled to know what you are going to protect.

I want you to know what I think about Maysville. It is 165 years old and on the Ohio River, 65 miles above Cincinnati, Ohio, 60 miles below Portsmouth, Ohio, and 60 miles from Lexington, Ky., on the interior.

It was settled by Simon Canton and Daniel Boone.

All the early pioneers who came from New England, the South, and the East, came by flat boat and canoe down the Ohio River and chose Maysville as a settlement because of the magnificent harbor that it has.

It is supposed to have the best harbor on the Ohio River.

Following its settlement, it has grown through the years. But it would have become a much bigger city had it not been held back by flood after flood, and the fears of flood. Only a dauntless, courageous, fearless people could have survived the floods of the Ohio River. But today we are the biggest little city on the Ohio River.

As Mr. Coughlin told you, we are the second biggest early looseleaf tobacco market in all the world. We have the largest factory for power-driven pulleys in the world. We have the biggest factory for the manufacture of bicycle parts in the world. We have one of the oldest and one of the biggest cotton factories in all of the world. And in the United States there is not a larger Carnation plant than we have in Maysville. We are also on the main line of the Chesapeake & Ohio Railroad and of the L. & N. We have a magnificent State bridge which connects Maysville with Aberdeen, Ohio.

We have a very fine hospital. It is just receiving a $700,000 addition. It is the only hospital within a radius of 70 miles.

We have patients from Ohio and Kentucky, and some lower parts of Indiana. I am telling you these facts, because I want you to

realize that when we have a flood, all of this is wrecked for weeks at a time.

Speaking of our burley tobacco plants, we have 19 warehouses and 11 of those are submerged when we have a major flood. We have two huge livestock markets. We have the Bank of Maysville, which is the oldest bank in Kentucky, and two other banks. All of these institutions that I have named are in the flood area and, when we have a flood, we are wrecked.

Our schools, our homes, our industries, our banks, our hospital, our churches are all flooded.

FLOODWALL 60 PERCENT BUILT

Now we have, as Senator Cooper said, about 60 percent of the floodwall built. As you gentlemen know, 60 percent is of no value to us now. We have put on a huge building program. People have been excited and thrilled to think that we were going to have a floodwall, and with that thought in their minds, they have spent millions of dollars.

We also have seen real estates, houses in the flood areas, those which were priced at $5,000, go to $17,000. People have been spirited with the thoughts of the floodwall.

Now we are in constant dread and in constant fear that before the floodwall is completed we will have one of those floods.

It is for that reason that I ask you to appropriate $1,475,000. I do not want you to feel that it is a contribution. I want you to feel that it is a loan because the sooner that floodwall is completed, the sooner will our tax rates be increased until we will be able to repay our Government the gift that you let us have now.

Please remember that our floodwall must be completed and help us with the $1,475,000. I am very grateful.

In conclusion, let me say that as an individual citizen and in my official capacity as a representative of the citizens of Maysville, we are appreciative of the aid given to the Maysville floodwall by the Corps of Engineers and by the congressional committees of the Congress.

Senator HOLLAND. We are glad to have you.

Senator CLEMENTS. Mr. Chairman, I believe that the chairman would agree now, with the statement I made, as to the judgment that was shown by the city of Maysville in the selection of their mayor. The mayor has made a fine statement and I, in leaving, want to tell you that we have the utmost confidence that this committee will recommend to the Senate the allocation of such moneys as are needed to carry on this year's work, both at Maysville and at Covington.

Senator HOLLAND. Thank you, Senator.

Does that complete the Kentucky presentation?

Senator CLEMENTS. Yes, sir.

Mr. Chairman, let me ask a question first. I understood none of the other members desired to file a statement with the committee.

Mrs. HORD. I wish that each one of these members would make a statement. Mr. Donovan has bought all the rights-of-way for the floodwall for the city at no cost to the city, and we could never repay him as long as we live.

Mr. Donovan, will you not make a statement?

FLOOD WALL COMMITTEE, MAYSVILLE

STATEMENT OF THOMAS M. DONOVAN, MEMBER

Mr. DONOVAN. Mr. Chairman, I ask that you go along with us and grant us this appropriation. That is all I ask?

Senator HOLLAND. Are you of the Irish Donovans?

Mr. DONOVAN. That is right.

Mrs. HORD. And Mr. Kenneth Hardyman.

FLOOD WALL COMMITTEE, MAYSVILLE

STATEMENT OF KENNETH T. HARDYMAN, MEMBER

Mr. HARDYMAN. Mr. Chairman, I urge that you grant us this $1,475,000 so we can continue on with the work.

Senator HOLLAND. Thank you, sir.

Mrs. HORD. Mr. J. W. McNeil.

FLOOD WALL COMMITTEE, MAYSVILLE

STATEMENT OF J. W. McNEIL, CHAIRMAN

Mr. MCNEIL. The only thing I can say is that my predecessors have stated the case very clearly, and I hope that you will grant us this $1,475,000.

Senator HOLLAND. Thank you, sir.

What is the present population of Maysville, Mrs. Hord?

Mrs. HORD. I am sorry to tell you that the Federal census differed from the religious census. We had a religious census and it was 14,500. The Government came along and made a census and it was 8,750. But you cannot judge the value of the town by the number of its citizens. You judge it by the quality of its citizens, and there are no finer people in the world than there are in Maysville, a conservative people.

Senator HOLLAND. I notice that your churches are very conservative in their claims for membership.

Mrs. HORD. You know how a Federal census is. If a boy is away from Maysville he is not considered to be living in Maysville.

But since we are speaking about the census of Maysville, I want to tell you it is a very conservative population. We are famous for our conservatism.

During an inflationary time people go along in their usual, casual way. When a depression comes, it never hits Maysville because they have stayed by and they are ready for it. But we do need this help.

LOSS IN 1937 FLOOD

We lost in the 1937 flood 7 million pounds of storage tobacco. The Federal Government was getting taxes on that tobacco. We cannot get that back until we get a flood wall.

Senator HOLLAND. Thank you, Mrs. Hord.

Senator CLEMENTS. Mr. Chairman, that completes the statements.

Senator HOLLAND. Thank you very much.

I appreciate very much the attendance of this fine committee from Kentucky.

NORTH CAROLINA STATE PORTS AUTHORITY, WILMINGTON AND MOREHEAD CITY

STATEMENT OF G. W. GILLETTE, EXECUTIVE DIRECTOR

ADEQUATE NAVIGABLE WATERS

Mr. GILLETTE. Senator, I am here representing the North Carolina State Ports Authority.

Senator HOLLAND. You are George W. Gillette?

Mr. GILLETTE. I am George W. Gillette, director of the North Carolina State Ports Authority.

I am appearing here today, Senator, with considerable feeling. It is a feeling that my State has been unjustifiably neglected in recent years in the matter of providing adequate navigable waters.

North Carolina has two deep-sea ports: Wilmington and Morehead City. The port of Wilmington is as old as the country. Morehead was developed into a deep-set port in 1936, local interests and the State providing a dock and a transit shed and the Federal Government providing 30 feet of water. Within the past 3 years my State has spent $7½ million in the building of new, modern, and efficient port facilities at these 2 ports, and the State ports authority is now preparing to spend another million and a half on an expansion program. The State legislature just ended appropriated $45,000 to conduct a survey, looking toward the development of its small-feeder ports along the inland waterways.

I give you this background to show, and definitely assure you, that North Carolina is taking a renewed interest in its navigable waters. Our Governor realizes and recognizes the value and importance of our large inland waters and what they mean to the State and the Nation. The largest amphibious training base in the world is located only 25 miles from Morehead City. Our port at that place is used regularly by the Marine Corps and the Navy. It serves them on overseas movements. On the other end of coastal North Carolina is the largest Army training camp in the country.

FORT BRAGG

Fort Bragg is less than 10 miles from the head of navigation on the Cape Fear River, which in turn is 90 miles from the port of Wilmington on the lower Cape Fear. And 20 miles below Wilmington there is now being built by the Federal Government a $25 million ammunition-loading depot, which, when completed 2 years hence, will be the largest and most modern in the country.

Wilmington is, or was until just recently, the third largest petroleum port on the Atlantic seaboard, but it has lost its position for a definite reason. The tonnage through the port of Wilmington has been rather consistently second highest of any south Atlantic port for the past few years.

Annual tonnage through the port of Morehead City has increased constantly since 1945, reaching a peak in 1952, having doubled in 4 years, but it cannot increase further until something is done.

North Carolina's two deep-sea ports have reached a pause in growth until the Federal Government not only gives us the navigable water it is obligated to maintain but not until it increases the project depths at both ports to care for the ships—tankers and cargo carriers—of today and tomorrow.

North Carolina is the only State on the eastern seaboard with a major port that does not have at least 34 feet of water, and several have 35 to 40 feet. We have a project depth of 32 feet at Wilmington (34 feet authorized) but not maintained at that depth.

SHIP GROUNDING

A survey in April shows a minimum depth of 27.2 feet in the Cape Fear River. Two months ago we had a ship to ground in front of our docks. Later, we had to turn away a ship due to inadequate water. At Morehead City, where we are supposed to have a depth of 30 feet, we now have 27 feet. I have three complaints now of ships grounding due to inadequate water. News of this condition travels over the shipping world.

Gentlemen, we cannot develop our ports under these conditions. And I must emphasize again that our ports are for the Nation as well as for the State. North Carolina is spending big money to develop its ports and waterways. This is supposed to be a cooperative effort with the Federal Government, and we are wondering.

No port with less than 35 feet of water is a modern port today. The Mariner-type ships being built today are the cargo ships of tomorrow. They require 35 feet of water. The ships of yesterday are the only ones that can navigate the entrance channel to North Carolina's deep-sea ports. Tomorrow, the ships of yesterday will be obsolete; likewise, the ports and connecting waters designed around them. We must recognize trends and at least keep within shooting distance of them.

AUTHORIZED SURVEY

The 81st Congress, 3 years ago, authorized 34 feet of water for Wilmington. Congress 4 years ago authorized a survey of the Morehead City Channel and Harbor, based on our request for 35 feet of water. The Korean war called a halt to all such work except and unless it was justified in the name of national defense. Work on navigable waterways was stopped insofar as North Carolina was concerned, this in spite of the fact that the Navy requested an increase in depth to Morehead City and a widening of the anchorage basin, and the Maritime administration, with a reserve shipyard adjacent to our Wilmington facilities, requested that the Cape Fear River be deepened to 34 feet.

The Chief of Engineers recommended funds to deepen the Cape Fear River to the 34 feet already authorized, but they were stricken by the budget.

Gentlemen, I am well aware of your responsibilities to the Nation. Yours is a serious duty to perform. I do not expect you to single out North Carolina projects for development that have not been recommended in the fiscal 1954 budget. We have not requested this of our able Senators Hoey and Smith, but I must stress the fact that North

Carolina has had no new work on its navigable waters since the beginning of World War II in 1940, except 1946, when funds were more or less available to dredge the Cape Fear River to 32 feet. That is 14 years if we include 1954.

I assure you that our navigable waters the Government is obligated to maintain have deteriorated badly. That is what I am stressing for this occasion: maintenance. It is not only the channels connecting our deep-sea ports of Morehead City and Wilmington but it is the inland waterways, the small ports and harbors and inlets all along the coast that afford refuge and docking facilities for ships in the greatest fishing area in the United States.

RESTORATION REQUESTED

The North Carolina State Ports Authority, with due regard of your obligations, respectfully requests that you restore the budget cut made in funds for deeping the Cape Fear River and for maintenance dredging in order that our navigable waterways, already inadequate as authorized, may be at least kept at authorized depth. Our deep-sea ports cannot survive on 27 feet of water when they were designed for 35 feet.

With that we will look hopefully to another year for badly needed new work, long since overdue, to bring our waterways nearer to parity with other States and other ports.

I thank you for the privilege of appearing before you today.

Senator YOUNG (presiding). Thank you very much for your statement, sir.

The committee will stand in recess until 10 o'clock tomorrow morning.

(Thereupon, at 3:35 p. m. Thursday, May 21, 1953, the hearing was recessed to reconvene on Friday, May 22, 1953, at 10 a. m.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS FOR 1954

FRIDAY, MAY 22, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10:15 a. m., in room F-39, the Capitol, Hon. Milton R. Young (chairman of the subcommittee) presiding.

Present: Senators Young, Dworshak, Hayden, Ellender, McClellan, and Robertson.

CIVIL FUNCTIONS

FLOOD PROTECTION, HARTFORD, CONN.

STATEMENT OF HON. PRESCOTT BUSH, A UNITED STATES SENATOR FROM THE STATE OF CONNECTICUT

FOLLY BROOK PROJECT

Senator YOUNG. The committee will come to order.

Senator Bush, it is a pleasure to have you appear before this committee. You may make any statement you desire. I understand you have some witnesses you will introduce.

Senator BUSH. Thank you, Senator. I appreciate very much the courtesy of the committee.

I would first like to make a statement and then present two witnesses on this subject, from Connecticut.

I request that the subcommittee give very careful consideration to the restoration of funds in the civil functions budget to permit work in the next fiscal year on the Folly Brook project in Hartford, Conn. This project is the missing link in the chain of flood protection for the Hartford area, which contains many vital industries and in the past has experienced floods taking a heavy toll in lives and property.

FLOOD DANGER

The Folly Brook project area includes 450 homes, a number of business establishments and would be exposed to damage by another large flood. I have been informed that the project is needed to remedy a situation which is unhealthy, unsanitary and dangerous to the children of the neighborhood.

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Brig. Gen. C. H. Chorpening, Assistant Chief of Engineers for Civil Works, has advised me that it has been the Federal policy since fiscal 1950 to defer initiation of civil work which does not directly contribute to defense or civilian requirements, and he states that for that reason funds for the Folly Brook project were not included in the budget now before you. The city of Hartford, Conn., takes the position that the Folly Brook project, by completing the chain of flood protection for the city, will make a distinct contribution to those requirements.

Mr. Charles W. Cooke, director of public works for the city, and State Senator Joseph Bonaquisto, are here to place before you Hartford's case. I am confident that you will afford them every courtesy, and will give proper consideration to the statements they will present.

Mr. Chairman, I very much appreciate the courtesy in allowing me to appear promptly so I may attend a committee meeting. Thank you, sir.

Senator YOUNG. The next witness may proceed now.

Mr. Cooke, you are director of public works of Hartford, Conn.?

CITY OF HARTFORD, CONN.

STATEMENT OF CHARLES W. COOKE, DIRECTOR OF PUBLIC WORKS

GENERAL STATEMENT

Mr. COOKE. That is right, Mr. Chairman.

I have a written statement, a page and a half, a short letter from the chairman of the Hartford Flood Commission, and a letter from the city manager urging this project.

I would like to read, with your permission, these three statements.

Senator YOUNG. Yes, you may do so.

Mr. COOKE. We, in Hartford, respectfully urge your serious consideration and favorable recommendation of the inclusion in the civil function bill now pending of an item of $275,000. I might say, Mr. Chairman, that I am not sure of that figure. The Army engineers may have increased or changed that. What I meant to infer is whatever figure they recommend is what we recommend.

ESTIMATED COST

Senator YOUNG. The engineers' estimated cost is $275,000.

Mr. COOKE. Thank you.

The expenditure of this amount is for the completion of the so-called Folly Brook flood-control project. This is a part of Hartford's flood-control program.

This Folly Brook problem is not a new project, but is the final stage in our local protective works and has been authorized by the Congress. Included are about 800 lineal feet of pressure conduit, about 700 lineal feet of earth dike, culvert changes beneath three streets, and the raising of a railroad stoplog structure.

This work will protect from flooding by backwater from the Connecticut River an area of about 120 acres in the southerly section of Hartford centered along Franklin Avenue. Within this area are about 450 homes, 1 public school, and numerous business establishments.

Should a superflood occur, and these can come at any time as Kansas City can well remember, Hartford could have a repetition of its previous disasters unless the final link in its chain of protection is in place.

Within the area behind our dikes and flood walls, there are two electric power stations which furnish electric energy to metropolitan Hartford and the many important factories in this area, among which are the Pratt & Whitney aircraft plant. During the recent war, these plants had defense contracts in excess of one-half billion dollars. Such a superflood could stop these power stations for an unknown length of time.

LOCAL FUNDS

This Folly Brook work will be partially financed by the city of Hartford. Hartford has already advanced its share of this cost, which funds are in the hands of the New England divison engineer at Boston.

Hartford, through its flood commission, has been working very seriously on flood control problems since the spring of 1936, and has received complete cooperation from the United States Engineer Corps and various other governmental agencies in carrying out this program.

Hartford appropriated over $5 million of its own funds to help pay for flood protection, rights-of-way, et cetera.

The United States flood control plan for the Connecticut Valley includes 22 upstream reservoirs, only 6 of which have been built. Until these remaining 16 reservoirs have been completed, Hartford is vulnerable to the ravages of the maximum flood which the United States Engineer Corps predict can occur.

After the 1938 flood, the United States Engineer Corps changed its design flood from a peak flow of 335,000 cubic feet per second to one of 436,000 cubic feet per second at Hartford. This obviously raises the height of necessary local protection.

When General Reybold, former Chief of Engineers, was in Hartford in 1944, he was shown this Folly Brook situation and he agreed that this work should be done and he promised that it would be done.

Of course World War II has been responsible for the postponement of several civil function projects, but we feel that this project which involves such a relatively small amount of Federal funds and has been authorized by the Congress should be completed.

May we again urge your serious consideration and favorable recommendation for this relatively minor appropriation to complete Hartford's flood-protective works.

LETTER OF GENERAL REYBOLD

I have a brief statement from the chairman of our flood-protective works concerning General Reybold's visit when he agreed that the remaining portion of the Folly Brook project should be completed and he promised us that he would complete it. Of course, he retired as Chief of Engineers before he could carry out his promise.

We of Hartford's flood commission know that the United States Engineer Corps has not forgotten us and has kept this work in mind, not as a new project, but as the one remaining item in Hartford's complete flood-protection program. We have had very wonderful cooperation with the United States Engineer Corps during the years we have jointly been involved in this work.

Hartford appropriated over $5 million toward local flood-protective works and we believe we are the only community in the Connecticut Valley which has made a contribution of this nature. During the flood of March 1936 Hartford suffered direct damage of over $12 million and indirect damages probably twice that sum. We consider this flood damage to Hartford approximately $20 million. Until our entire flood-protective plan has been completed, we are still vulnerable to this same form of attack.

We have left with the Engineer Corps a balance of funds left over from a completed work, which sum is ample to take care of our share of this so-called Folly Brook project.

We respectfully urge your favorable consideration of this last flood-control item in Hartford.

I have another letter, the last one, from the city manager.

Hartford's director of Public works and the chairman of our flood commission have written to you regarding the importance to Hartford of completing the flood-control program in this area.

I am sure you will understand that the city will not be fully protected until the Folly Brook project is completed. It will be unfortunate if a severe flood should occur on the Connecticut River and despite the work which has been done, the floodwaters would enter the protected area through the unprotected stretch of land which is involved in this project. Hartford has provided funds to take care of its share of the project several years ago.

May I stress the importance of completing this work and urge you and the members of the Appropriations Committee to support the Federal appropriation of $275,000 needed to finance the project.

Your sympathetic consideration will be greatly appreciated by the people of Hartford.

I have two photographs. These photographs show the brook itself which flows through a residential section. When that is in flood stage you can imagine the worry that parents of small children have on their hands. The children might fall into it. This picture shows the type of general flood protection which has been completed along the west bank of the river in Hartford by the Engineer Corps. These other two show the type of work which has been completed.

FEDERAL COST

Senator YOUNG. There is not a great deal of money involved for a project which would result in so much good. The Federal cost would only be $275,000?

Mr. COOKE. That is right.

Senator YOUNG. Is this project ready for construction, do you know?

Mr. COOKE. I think the Army engineers have their plans practically completed.

Senator YOUNG. I see the Corps of Engineers has $24,700 in their request for planning funds.

Mr. COOKE. Well, I have seen preliminary drawings. There may be some more detailed designing and drafting to be completed and programs of survey work. But it is substantially done. They know all about it. We have made available to them all the information we have, and will furnish them whatever additional they wish, which we can.

Senator YOUNG. Does that complete your statement?

Mr. COOKE. I have a map here if you have any questions.

Senator YOUNG. I do not think we will have any further questions, Mr. Cooke.

Mr. COOKE. Thank you, sir.

Senator YOUNG. Joseph A. Bonaquisto, State senator from Hartford, Conn.

STATE OF CONNECTICUT

STATEMENT OF HON. JOSEPH A. BONAQUISTO, A MEMBER OF THE GENERAL ASSEMBLY

GENERAL STATEMENT

Mr. BONAQUISTO. Mr. Chairman, this Folly Brook project is in my district, and in Senator Elmer Watson's district, which is the fourth district. This Folly Brook is on a line between our two districts. We have both taken trips down to this project, walked through it and consulted with the people that lived on the north end of the project.

I have taken some pictures of the situation. It is out of this world. Children are not allowed by their parents to go in their backyards because of the dangerous aspects of falling into this brook. When this brook is fairly nearly dry, it is about 10 feet deep. When we do get some rains, it runs about 8 or 10 feet, the water gets in there about that deep.

Parents in that area feel that they cannot allow their children to go anywhere near there. They have attempted to build fences behind. But what is happening is that parts of the edges of the brook are sliding in, and their fences are going in. Not only that, but in the summertime it is rather foggy in that area, very unsanitary and very unhealthy.

The sum of money in this appropriation is minor. It is approximately $275,000. It would definitely alleviate the situation. It is the only remaining project in the city of Hartford which is a mess. We are not proud to say we have in the city of Hartford such a situation. I attempted to introduce a bill in the State legislature bringing that particular project before the roads, rivers, and bridges committee. They looked at the situation very closely and went into it and realized that this was not a State situation, but a Federal situation.

Senator Watson asked me to deliver this letter to the chairman. He could not be here today because he is the Senate appropriations chairman of the State of Connecticut. He is in complete accord with me on this project.

If this committee would report this out favorably, the people of the city of Hartford and Wethersfield, in the State of Connecticut, would be eternally grateful. I hope your honorable committee will report favorably on this project.

Thank you very much.

LOCAL FUNDS

Senator YOUNG. Senator, your local interests have provided the necessary assurance that the Federal Government requires, is that right?

Mr. BONAQUISTO. I did not hear you, sir.

Senator YOUNG. Your local organization, the city of Hartford, has provided assurances of local contributions, have they not?

Mr. BONAQUISTO. Yes. They have one hundred and fifty-some-odd thousand dollars held in escrow at this time. This money, I believe, is being held by the United States Army enineers in Boston. Another factor which I would like to bring out is that when they attempted to start this project in 1945, I believe, or prior to 1945, the people in that particular neighborhood all gave their written consent that the officer, or whoever the Army engineers sent, would have the authority to go over their property in order to correct the situation. They have given them that right to go over their land.

LETTER FROM SENATOR WATSON

Senator YOUNG. Do you wish to have Senator Watson's letter made a part of the record?

Mr. BONAQUISTO. Yes, I would, Mr. Chairman.

Senator YOUNG. That will be done.

(The letter referred to follows:)

Members of the Appropriations Committee, I have discussed this Folly Brook project quite thoroughly with those who are vitally interested in the matter and we sincerely hope and feel your honorable committee will report this measure favorably.

At the present time the residents of Wethersfield feel this situation is unsanitary, unhealthy, and very unsafe. With the elimination of this project, it would aid the town of Wethersfield, the city of Hartford, and the State of Connecticut.

I urge this honorable committee to favorably consider this appropriation to match funds already available by the city of Hartford to eliminate this hazardous situation.

Mr. BONAQUISTO. I would like to leave this letter.

Are there any further questions, Mr. Chairman?

Senator YOUNG. I do not think so, senator. It is a pleasure to have you with us.

Mr. BONAQUISTO. Thank you, sir.

Senator YOUNG. Senator Purtell?

STATEMENT OF HON. WILLIAM A. PURTELL, A UNITED STATES SENATOR FROM THE STATE OF CONNECTICUT

FOLLY BROOK PROJECT

Senator PURTELL. I want to thank you for permitting me the opportunity of being here at a time other than that which was assigned to me originally.

I would like to discuss for a moment this Connecticut River flood-control project known as the Folly Brook, which is the last portion of flood-control project on the Connecticut River that needs completion and has not yet been completed. This consists of approximately 38,000 feet of levees and concrete flood walls. It is the last part of a program for flood control on the Connecticut River at Hartford.

Construction of the overall project was initiated in December 1938. It was started with PWA funds and the Federal cost to date is approximately $6,480,000. In addition to this cost, local interests have provided lands, easements, and rights-of-way required for the project, except for the Folly Brook unit, and have contributed more than $2,500,000, toward construction of special features of the project which they desired.

This project, Mr. Chairman, was not included in the earlier flood-protection project at Hartford because when that project was up the location of a proposed expressway through the south side of Hartford had not been decided upon and, therefore, it seemed wiser to temporarily set aside that part of the project. With the passing of time, however, and the location of the highway, the need for the completion of this work has become increasingly necessary.

May I at this point, Mr. Chairman, introduce in my statement the testimony which one of my predecessors, Judge Raymond E. Baldwin, submitted to the Senate Committee on Public Works when authorization of the project was being considered by that committee in the fall of 1949, and which I have marked "Exhibit A"? I ask that it be included in the record.

Senator YOUNG. That will be done.

(The document referred to follows:)

STATEMENT OF HON. RAYMOND E. BALDWIN, A SENATOR FROM THE STATE OF CONNECTICUT

Senator BALDWIN. Yes, Mr. Chairman, I would like to make a statement.

Mr. Chairman and members of the committee, this project was not included in the earlier flood-protection project of the city of Hartford because at that time the location of a proposed expressway through the south side of Hartford made it seem wiser to omit this part of the project.

Before the Hartford flood-protection program at Hartford is completed, however, it will be necessary to undertake this work.

The proposed project would include 1,900 lineal feet of pressure conduit and 650 lineal feet of earth dike averaging about 5 feet in height at an estimated cost of $390,000.

I understand that this project has the approval of the United States Army engineers.

It is my understanding that only 5 of the proposed 22 upstream reservoirs in the Connecticut Valley have been completed.

I might say, Mr. Chairman, the project goes back for a long, long time, and that Hartford in the year 1936, and again in 1938 had two very disastrous floods, the most disastrous floods in its whole history. I do not know the exact figure, but it ran into several millions of dollars of damage, because the whole central part of the city was flooded on these two different occasions.

Senator DOWNEY. Well, Senator Baldwin, is this the modification of an existing project?

Senator BALDWIN. This is the modification of an existing project.

Senator DOWNEY. And increases the number or the capacities of the proposed dams?

Senator BALDWIN. Well, this merely takes care of a section of the city that was not taken care of originally, that was originally contemplated as being within the province of the whole flood-control project, but at that time we were constructing a large highway bridge across the Connecticut River at that point with approaches, and because of that fact, as I recall it, the thing was delayed, is that not correct?

Colonel GEE. This is right at the southern limit of the city of Hartford, and was excluded from the protection afforded by the authorized plan which is presently complete.

Senator BALDWIN. I might say along the suggestion you just made, the thought has been expressed that the local flood protection for Hartford as previously authorized by the Congress might be extended to cover this work under section 3 of the Flood Control Act of August 18, 1948, which states in part under the heading "Connecticut River Basin":

"Such modifications as may be found justifiable in the discretion of the Secretary of War and the Chief of Engineers."

If such is not the case and new authorization must be obtained before this work is undertaken, I urge this committee to give favorable consideration to this undertaking.

In other words, Mr. Chairman, this would essentially complete a rather extended flood-control project to which the city of Hartford has contributed today more than $4 million.

Am I correct on that?

Colonel GEE. I believe that is right.

Senator WATKINS. What would be the Federal expenditure on that?

Colonel GEE. About $390,000.

Senator DOWNEY. This is a proposal for levees?

Colonel GEE. This is a proposal to extend a pressure conduit upstream in order to afford additional protection to a recently developed area in the city of Hartford. The city has grown outside the area protected.

Senator DOWNEY. What do you mean by a pressure conduit, Colonel?

Colonel GEE. A closed culvert to replace a natural streambed, the upper end of which is at a sufficient elevation to exceed any flood crest which might pass the city, so that it will carry away the water effectively even in flood times.

It is not necessary to put any pumps in the system or to install flat gates on the lower end to avoid the effect of backflow.

Senator DOWNEY. You mean it is proposed to substitute a closed conduit for the natural waterway?

Colonel GEE. That has been done on a portion of this small stream. It is proposed to extend it upstream a considerable distance.

Senator DOWNEY. And that will facilitate the flow of the water, the storm water?

Colonel GEE. Yes, sir, and it will avoid the backing of floodwaters through that conduit if a flood approaching the flood of record should occur.

The building of the 23 or 24 authorized reservoirs upstream would afford protection to this area in this way. The crest of the flood would be reduced to the point where 2.2 feet of water would stand at the high end of the presently existing pressure conduit. This extension would afford additional protection to that area by running the conduit upstream, making the high end above the crest of any flood which might occur.

Senator DOWNEY. I see.

Senator BALDWIN. That presently is the scheme that has been followed there with great success.

Colonel GEE. Yes, sir.

Senator BALDWIN. One of the main tributaries of the Connecticut River flowing through the area of Hartford has successfully been put in just this kind of conduit that the colonel talks about, the higher end of which is beyond anything that has ever been thought of as a flood crest.

Our damage in the city is caused not so much by the water that comes down these watersheds, as by the backing up of the big river up these valleys, and this would take care of one of the small tributaries that comes to the river at that point.

Colonel GEE. Mr. Chairman, if the project for Hartford was presently under construction, it is the opinion of our attorneys that this modification could be made under the provision of law previously referred to. However, since the project is complete and has been turned over to local interests for operation and maintenance, it is our belief that additional legislative authority is required to reopen the project.

Interesting also is the fact that the ratio of benefits to cost in this project is 5.6 to 1.

Senator DOWNEY. Well, that certainly is a very impressive record for New England, as usual, financially, and that is a very acceptable formula certainly.

Senator BALDWIN. There is just one point I would like to add, Mr. Chairman, and that is this: When the flood-control works were planned, and undertaken at Hartford, they were undertaken in spite of the fact as I recall it that certain smaller flood-control reservoirs were to be constructed in the upper valley to catch a lot of the water before it got down there at all.

Now very few of those have been undertaken. I had a figure here which I think was 22 smaller dams.

Colonel GEE. I believe that is about right.

Senator BALDWIN. And only five of them have been built, so this is really a very necessary work, and I hope that the committee will consider it favorably.

Colonel, can you add anything more?

Colonel GEE. No, sir; I believe not.

Senator DOWNEY. Let me add for the purpose of the record the statement here from Senator McMahon that he planned to appear before our committee to urge favorable consideration of this pending measure, but that he has been called into an executive session of the Foreign Relations Committee, and desires the record to show that he favors the project.

There will be incorporated in the record at this point a letter from A. A. Ribicoff, Representative of the First District in Connecticut, and one from Senator McMahon.

(The documents above referred to are as follows:)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., July 25, 1949.

HON. DENNIS CHAVEZ,
Chairman, Public Works Committee,
United States Senate, Washington, D. C.

DEAR SENATOR CHAVEZ: I am informed that your committee will hold hearings tomorrow on the so-called Folly Brook project, which I understand is the final link in the chain of flood protection for Hartford, Conn.

I wish to say that I consider this project a most worthy one and I sincerely hope it may be possible for your committee to approve the Folly Brook project.

I will appreciate it very much if you can arrange to indicate my interest in this project in the records of your committee on this subject.

Thanking you and with high regards, I remain,

Sincerely yours,

A. A. RIBICOFF, M. C.

JULY 26, 1949.

HON. SHERIDAN DOWNEY,
Chairman, Subcommittee on Rivers, Harbors, and Flood Control,
Senate Public Works Committee, Senate Office Building,
Washington, D. C.

DEAR SENATOR DOWNEY: I wish to call to the attention of your subcommittee the proposed Folly Brook flood-control project. I intended to appear before the subcommittee this morning to ask that it report favorably on this project. However, I was called to a session of the Foreign Relations Committee and, therefore, my plea is contained in this letter.

Considerable flood-control work has been done in the Hartford area. The city of Hartford alone has spent $4 million in this connection. Now the United States engineers ask that the Folly Brook project be authorized. It is the last piece of work needed to give Hartford sufficient protection from flooding.

This work is needed to protect over 180 acres of residential and commercial structure which has an assesed value over $5,500,000. The estimated cost of the project ranges from $350,000 to $400,000.

With kindest regards, I am

Sincerely yours,

BRIEN MCMAHON,
United States Senator.

Senator DOWNEY. Senator Baldwin, I think that is satisfactory then. Do you want to place some documents in the record?

Senator BALDWIN. Yes, Mr. Chairman. I wish to place a more complete copy of what I said in the record, and a copy of the telegram sent by Mr. William H. Putnam who has been the chairman of this commission of Hartford, the city of Hartford, that has handled the whole project, and also a telegram from Senator Pallotti in whose senatorial district in the State legislature this area is located.

Senator DOWNEY. The documents will be received and placed in the record at this point.

(The documents above referred to are as follows:)

"FOLLY BROOK CONTROL PROJECT

"This project was not included in the earlier flood-protection project of the city of Hartford because at that time the location of a proposed expressway through the south side of Hartford made it seem wiser to omit this part of the project.

"Before the Hartford flood-protection program at Hartford is completed, however, it will be necessary to undertake this work.

"The proposed project would include 1,900 lineal feet of pressure conduit and 650 lineal feet of earth dike averaging about 5 feet in height at an estimated cost of $390,000.

"I understand that this project has the approval of the United States Army engineers.

"It is my understanding that only 5 of the proposed 22 upstream reservoirs in the Connecticut Valley have been completed. This lack of upstream reservoir capacity presents a serious threat to a large portion of Hartford. The completion of this so-called Folly Brook portion would materially reduce this threat. It appears doubtful whether these 17 reservoirs will be built for some years.

"I am told that within the past year the United States Army engineers have increased what they refer to as 'their probable maximum flood.' It is said that this new design flood would raise the flood crest 2.2 feet at the southerly side of Hartford. Should this project flood occur at the present time, it is estimated that over 180 acres of residential, commercial and industrially developed territory would be flooded. The property within this particular area has an assessed valuation of about $5,500,000.

"As I said before, in order to complete Hartford's local flood protection—and I wish to emphasize the fact that the city of Hartford has contributed over $4 million to this flood-protection program—it is necessary that the Folly Brook area be added to the authorized Government program.

"The thought has been expressed that the local flood protection for Hartford, as previously authorized by the Congress, might be extended to cover this work under section 3 of the Flood Control Act of August 18, 1941, which states in part under the heading 'Connecticut River Basin,' 'Such modification as may be found justifiable in the discretion of the Secretary of War and the Chief of Engineers.'

"If such is not the case and new authorization must be obtained before this work is undertaken, I urge this committee to give favorable consideration to this undertaking. In view of the great risk incurred each day this work is delayed, the comparatively nominal cost involved, the extremely high residential and commercial loss in the event of flood and the already enormous contribution which the city of Hartford has paid as its share of the cost of work already undertaken to protect the city and its people and property, I feel that the project is justified and should be undertaken with the least possible delay.

"With your permission, Mr. Chairman, I submit herewith telegrams received from Mr. William H. Putnam, chairman of the flood commission of the city of Hartford and from State Senator Rocco D. Pallotti, senator of the third district, Hartford, in which this project is located. I think that both of these gentlemen express the feelings of the many people in the community and I hope their request will have your sympathetic consideration."

HARTFORD, CONN.

Hon. RAYMOND E. BALDWIN,
Senate Office Building:

The local flood protection for Hartford as authorized by the Congress did not include protection for about 300 acres in the south side of Hartford, principally because at the time the entire plan was being made up the location of a proposed expressway through this section made it seem wiser to omit this part of the project for the time being. It has been extremely difficult to get that portion back into the authorized program, probably due to war conditions. In order to complete Hartford's local flood protection, to the cost of which the city of Hartford has contributed over $4 million, this so-called Folly Brook area should be added to the authorized Government program. It would seem that the extension of the present authorized work is permissible under section 3 of the Flood Control Act of August 18, 1941, which states in part under the heading "Connecticut River Basin," "Such modifications as may be found justifiable in the discretion of the Secretary of War and the Chief of Engineers."

Only 5 of the proposed 22 upstream reservoirs in the Connecticut Valley have been completed. This lack of upstream reservoir capacity presents a serious threat to a large portion of Hartford. The completion of this so-called Folly Brook portion would materially reduce this threat. It appears doubtful whether these 17 reservoirs will be built for some years. Within the past year the United States engineers have increased their probable maximum flood. This new-design

flood would raise the flood crest 2.2 feet at the southerly side of Hartford. Should this project flood occur at the present time, over 180 acres of residential, commercial, and industrially developed territory would be flooded. The property within this area has an assessed value of about 5½ million dollars. This Folly Brook project is equivalent to the final link in the chain. In itself it is not very large, but it is a final link in the chain of flood protection which will surround and protect Hartford. On this basis it is certainly justified and it is our understanding that the United States Engineering Department agrees with this justification. The work included in this remaining part of the project is 1,900 lineal feet of pressure conduit and 650 lineal feet of earth dike averaging about 5 feet in height. The estimated cost of this work is $390,000.

We appreciate your help and interest in this problem which is very important to us.

WILLIAM H. PUTNAM.

HARTFORD, CONN., *July 24, 1949.*

Senator RAYMOND E. BALDWIN,
Washington, D. C.

As Senator of the third senatorial district located in Hartford and on behalf of thousands of south end residents we are appealing to you as our representative to appear before the Senate Public Works Committee and urge a favorable report on the Folly Brook project as the final link in the chain of flood protection for Hartford, Conn. We understand that a hearing in this matter has been scheduled for Tuesday morning, July 26, 1949. Inclusion of the Folly Brook project would protect 180 acres residential and commercial structure with an assessed valuation of $5,500,000. The Folly Brook project entails 1,900 feet pressure conduit and 650 feet of earthen dike averaging 5 feet high, the estimated cost amounting to $390,000. The city of Hartford has already spent 4 millions of dollars on the flood control project. Again we therefore urge you to do everything in your power to prevail upon the committee to act favorably on the Folly Brook project.

Sincerely yours,

Senator ROCCO D. PALLOTTI.

Senator DOWNEY. Thank you, Senator.

Senator BALDWIN. Thank you much, Mr. Chairman.

Senator DOWNEY. Let the record show that Senator Saltonstall wants to appear on the record as favoring the projects for the State that were favorably reported by the House bill.

I would like to place in the record at this point a report by the Corps of Engineers on a bill S. 234 by Senator Smith of Maine.

Senator PURTELL. I would also like to have inserted at this point an excerpt from the Senate Committee on Public Works report on the bill which authorized the construction of this project, which I have marked "Exhibit B". I ask that it be included in the record.

Senator YOUNG. That will be done.

(The information referred to follows.)

EXHIBIT B

SUMMARIES OF PROJECTS RECOMMENDED BY SENATE COMMITTEE

HARTFORD, CONN.—CONNECTICUT RIVER BASIN

Location.—Hartford, Conn., is located in Hartford County on the west bank of the Connecticut River, 52 miles above the mouth.

Existing project.—The existing project for Hartford, Conn., authorized by the Flood Control Act approved June 28, 1938, provides for the construction of a system of levees and flood walls.

Plan of recommended improvement.—Provides for modification of the authorized plan of improvement for Hartford, Conn., to include therein the Folly Brook dike and conduit.

Estimated cost to the United States.—$239,000.

Estimated cost to local interests.—$150,000.

Remarks.—The Hartford project is economically justified, the ratio of benefits to costs approximating 5.6. The area protected by the local protective works includes the principal industrial areas, important portions of the municipal, civic, and commercial areas, extensive residential developments and Brainard Field, the municipal airport, all within the city limits of Hartford,. The area which would be protected by the proposed Folly Brook extension includes approximately 100 acres of residential, commercial, and industrial development. This elevation is 2.2 feet below the project flood crest modified by future reservoirs or 10.8 feet below the unmodified flood crest. As it is doubtful whether the comprehensive system of reservoirs will be completed for many years hence, the construction of this extension to the original project is warranted.

Senator PURTELL. I believe that these statements very clearly set forth the need for the undertaking of this Folly Brook project without further delay. There are one or two points in connection with that testimony, however, which I would like to draw to your attention.

ESTIMATED COST

The Folly Brook portion of the project consists of approximately 1,900 linear feet of pressure conduit and 700 feet of earth levee. The estimated cost of this work at the time of authorization, based on 1949 prices, was $389,000—$239,000 Federal; $150,000 local. The current estimate of cost, based on July 1952–53 prices (3½ percent increase over July 1952), is $463,162. This represents an increase of practically $75,000 in the estimated cost over the 1949 estimate.

Mr. Chairman, there is no reason for believing that there would not be a continuing increase in the future unless this project is completed. Or, to put it another way, had we completed the project when it should have been completed, there would have been a saving of $75,000.

The local community's share of the cost has been held in escrow by the Army engineers at Boston for something longer than six years.

ASSESSED VALUE OF AREA

Another item in the testimony of former Senator Baldwin which I think has a very important bearing on the case is the fact that the property within the particular area which would be affected had at that time—1949—an assessed valuation of about $5,500,000. At today's market, and with the great amount of development within these intervening years, the property hazard is far in excess of that sum.

The project is economically justified, the ratio of benefits to costs being approximately 5.6. That in itself should be an important factor.

I realize that under the criteria laid down by the Bureau of the Budget it has not been the Federal policy to initiate civil work projects not directly contributing to defense efforts, but I cannot feel that this is a really new project. If you will glance at this map, Mr. Chairman—and, if I may, I would like to submit it as exhibit C—you will observe its location; right at the end of this huge $10 million project. This has all been completed, Mr. Chairman and members of this committee. The little thing that we are talking about is this dotted area down here [indicating]. I ask that that be entered as exhibit C, Mr. Chairman.

Senator YOUNG. That will be filed with the committee.

TOTAL ACRES PROTECTED

Senator PURTELL. Further, the area protected by this project includes approximately 100 acres of residential, commercial, and industrial development; and, without stretching the imagination too far, I think you can visualize the very serious effect on the prosecution of the defense program a possible flood in this area would have.

Finally, Mr. Chairman, this is the last little bit to complete a project on which the Federal Government has already spent $6,500,000. In the interest of efficiency and economy in Government, let's finish it and get it off the books.

I talked this morning or had a conversation with one of the members of my staff about the chairman of the committee in Hartford, and he tells me that that whole area today, because this has not been completed, is still quite vulnerable to flood. Now if we spend these tremendous sums of money to protect the area along the Connecticut River and left this Folly Creek situation as it is today, then I ask you in the interests of economy and in the interests of the people of Connecticut along at that point that you consider completing that program.

Senator ROBERTSON. Did you ask the Director of the Budget why he did not include this in the revised estimate for funds?

Senator PURTELL. No, I have not made inquiry. As a matter of fact, the matter was called to my attention yesterday, and I understood that it was to be handled otherwise. I will, however, call about it and be glad to acquaint the committee with such information as I can obtain.

Senator YOUNG. Thank you very much, Senator.

Senator PURTELL. Thank you, gentlemen.

Senator YOUNG. I would like to have Senator Martin, of Pennsylvania, appear now.

Senator MARTIN. That will be fine, because there are to be some other witnesses on this. I think they are assembling now. I have a meeting of public works.

Senator YOUNG. I understand, Senator.

STATEMENT OF HON. EDWARD MARTIN, A MEMBER OF CONGRESS FROM THE STATE OF PENNSYLVANIA

NEW CUMBERLAND AND HILDEBRAND LOCKS AND DAM

Senator MARTIN. Mr. Chairman, I want to thank you for this opportunity to bring to your attention two other important projects in connection with your consideration of 1954 fiscal funds for rivers and harbors construction and improvement. I refer to the New Cumberland locks and dam and the Hildebrand lock and dam which are links in the inland waterways which furnish water transportation to the vital industries of Pennsylvania.

You will note, Mr. Chairman, that the budget before you contains no funds for the New Cumberland locks and dam and only the sum of $45,000 for planning on the Hildebrand lock and dam. No construction money has been provided in 1954 fiscal budget for either of these projects, yet all of the planning has been complted on the New

Cumberland project, and according to the planning report of the Corps of Engineers, the planning on the Hildebrand lock and dam, if not completed at this date, will be by June 1953. Up to this point, a total of $229,000 in planning money has been made available for the New Cumberland locks and dam and $70,000 for Hildebrand.

Mr. Chairman, I do not need to stress the importance of these projects because they are well know and are part of a comprehensive plan approved by the Congress, and authorized by previous legislation, River and Harbor Act of 1950.

In fact, I believe the New Cumberland Locks and Dam could date its authorization back to the plan of general improvement to the Ohio River authorized under the River and Harbor Act of 1909.

NEW CUMBERLAND PROJECT

The New Cumberland project will construct a new dam and two modern locks on the Ohio River at New Cumberland, W. Va. It will replace 3 locks and 3 dams of obsolete construction and now in the state of disintegration, located between Midland City, Pa., and New Cumberland, W. Va. The construction at New Cumberland is estimated at approximately $43 million when completed, the cost to be spread over a period of 5 years. The plans call for construction to begin in fiscal year 1954, and it is estimated that between $2 million and $3 million would initiate the construction work. To delay construction work on the New Cumberland project for another year, in my opinion, Mr. Chairman, would invite disaster. The condition of the 3 locks involved, especially lock No. 7, represents a serious hazard to water transportation which supplies vital raw materials to support defense production in the great steel production areas of Pennsylvania.

EFFECT OF BREAKDOWN OF LOCKS

A breakdown in any one of the locks would cause a tieup of millions of dollars worth of materials and a slowdown in the production of steel and other equally important products. Attempts to repair such breaks would be more costly than to proceed with the orderly replacement as planned by the Corps of Engineers.

HILDEBRAND PROJECT

I do not want to emphasize the need for one of these projects above the other, Mr. Chairman, because both are vital connecting links. The Hildebrand lock and dam near Fairmont, W. Va., will provide for the replacement of the present locks Nos. 12 and 13 which are obsolete and inadequate to handle the traffic they can and should carry. The overall estimated cost of the Hildebrand lock and dam is somewhat over $15 million and while only planning funds for this project are requested in the budget, it is my earnest request, Mr. Chairman, that the subcommittee also consider the advisability of providing initial construction funds for Hildebrand as well as for the New Cumberland locks and dam. It is my understanding that between $2 and $3 million would also be required to begin construction in the fiscal year 1954.

IMPORTANCE TO STEEL INDUSTRY

Other witnesses will present to you in more detail the serious need for the initiation of the construction at New Cumberland and Hildebrand without further delay. I am sure the subcommittee realizes that the whole steel industry in Pennsylvania is dependent upon raw material resources which lie along the Ohio and Monongahela Rivers in this area, and are transported over these waterways.

Over 35 percent of our national steel production comes out of the Pittsburgh; Wheeling, W. Va.; and Portsmouth, Ohio areas.

Mr. Chairman, there is a group of men here to testify relative to these projects. I am terribly sorry that I cannot remain, but I want it understood that I am fully in accord with what they are presenting. I know the situation in the Monongahela Valley and in the Ohio Valley as it relates to transportation. I am not going into the figures, but I could, relative to the transportation over these two great rivers. The coal supply for the making of steel, for example, now largely comes from West Virginia. The quality of coal in West Virginia is more adapted for the making of steel than that in so many other localities. About the only way that it can be brought down from West Virginia economically is through the Monongahela River. These original dams, I think, were probably constructed almost 50 years ago, and particularly the dams on the Ohio are liable, if there would be a heavy flood, to go out. If they would go out, I just don't know how the steel industry of the Pittsburgh, Wheeling, Portsmouth, Ohio area could proceed economically and at the speed required in case we would be thown into a major catastrophe like a great world war III.

Senator YOUNG. Senator Martin, I would like to ask Colonel Milne a question.

ESTIMATE OF COST

Is the estimate of $1,582,500 the budget estimate for construction this year on the project Senator Martin is speaking of?

Colonel MILNE. The $1,582,500 was the Corps of Engineers within ceiling request to the budget for the New Cumberland Lock and Dam.

Senator YOUNG. It was turned down by the Bureau of the Budget?

Colonel MILNE. That is correct, sir.

Senator MARTIN. I thank you very much, Mr. Chairman, for the opportunity.

I want you to understand that I am fully in acord with what the others witnesses will have to say. I am very familiar with this problem, and I have been over the ground. I am only sorry that I just cannot be here with them. Thank you very much.

Senator YOUNG. Thank you, Senator.

Mr. French? Your group may come up all at the same time and sit at the table, if you will.

UNION BARGE LINE CORP., PITTSBURGH, PA.

STATEMENT OF LOWELL L. FRENCH, EXECUTIVE VICE PRESIDENT

PREPARED STATEMENT

Mr. FRENCH. Mr. Chairman, I am Lowell L. French, executive vice president of the Union Barge Line Corp. I would like to have my statement filed, and I think arrangements have been made.

Senator YOUNG. That may be done.

(The statement referred to follows:)

STATEMENT OF LOWELL L. FRENCH, EXECUTIVE VICE PRESIDENT, UNION BARGE LINE CORP., CONCERNING THE VITAL IMPORTANCE OF REPLACING WORNOUT OHIO RIVER LOCKS AND DAMS NOS. 7, 8, AND 9 WITH A SINGLE MODERN LOCK AND DAM INSTALLATION AT NEW CUMBERLAND, W. VA.

The Mississippi River and its many tributaries form a vast network of navigable streams, commonly called the Mississippi River system, which spreads itself throughout the midcontinental area extending from the Appalachian Mountains on the east to the Rocky Mountains on the west and from the Canadian border on the north to the Gulf of Mexico on the south. It serves 31 States and interconnects the more important midwestern industrial and commercial centers such as Pittsburgh, Cincinnati, Louisville, Evansville, St. Louis, Kansas City, Minneapolis, St. Paul, Chicago, Memphis, New Orleans, and many others. In 1950 the barge lines operating on the Mississippi River system performed 33.5 billion cargo ton-miles as against only 5.5 billion cargo ton-miles during 1931, which reflects an increase of more than 500 percent within a 20-year period. Tonnage on this inland waterway system is continuing to mount and year by year barge-line transportation is being more firmly established as an important part of our national transportation system.

At the northeastern tip of the Mississippi River system is the so-called Pittsburgh district, roughly embracing the territory along the Ohio River above its mile point 109 and including areas adjacent to the navigable portions of the Allegheny and Monongahela Rivers. Considering only the channels with a minimum depth of 9 feet, the aggregate length of the Pittsburgh district rivers is only about 6 percent of the Mississippi River system as a whole, but in the year 1950 they carried approximately 28 percent of the total freight of the entire system.

The Pittsburgh district ranks third in the Nation industrially and its products are of vital importance to the economic welfare of our country and to the national defense. Unquestionably this position of industrial eminence can be attributed largely to the availability and use of low-cost river transportation. The 39 million tons of freight which moved on the local rivers in 1950 appears to be ample evidence of what this form of transportation means to our section of the country.

The iron and steel industry—a basic industry serving the Nation's requirements during peace and war—is heavily concentrated in the Pittsburgh district and depends to a considerable extent upon river transportation for the assembly of raw materials and the distribution of finished products. Although economy is one of the principal considerations, the steel companies realize that other methods of freight carriage could not possibly be relied upon to handle the incredible large volume of tonnage needed to keep their plants in operation. Manufacturers of other products likewise depend upon the waterways to serve their transportation needs involving the movement of a wide diversity of commodities and materials.

A great amount of traffic moving on the Pittsburgh rivers originates and terminates locally but industry is also benefited otherwise by being able to use river transportation for inbound and outbound interterritorial shipments which aggregate millions of tons annually. Local traffic consists predominantly of coal, coke, sand and gravel, gasoline, oil, limestone, iron and steel articles and acids, all of which move in large annual tonnage volume. Outbound interterritorial shipments are made up of iron and steel articles of various kinds, sulfate of ammonia, benzol, acids, gasoline and oil, cement, slag, machinery, newly constructed river barges, towboats and other floating equipment, contractors' equipment, etc. Inbound interterritorial movements involve gasoline, lubricating oil, heating oil,

iron and steel scrap, sulfur, coal, coke, iron and steel articles of diversified nature, fluorspar, chemicals, acids and many other things. The volume of interterritorial tonnage is enormous and moves throughout the year without seasonal interruptions.

The Pittsburgh district is served by many private and for-hire barge line transportation companies, including three of the largest common carrier operators on the inland rivers and also a large contract carrier, all subject to the jurisdiction of the Interstate Commerce Commission. These carriers maintain regularly scheduled sailings to and from the local area, affording shippers frequent and dependable service between all points on the Mississippi River system and the Gulf Intracoastal Waterway without transfer or rehandling of the freight en route; in other words, the cargoes move from point of shipment to destination in the same barges into which they were originally loaded. Barges are available for the handling of a wide variety of products; in fact, a suitable type can be provided for the accommodation of practically any kind of commodity. Covered barges are furnished for goods requiring protection from the elements; open barges are used for cargoes not susceptible to weather damage; and tank barges are supplied for bulk-liquid shipments. Supplementing these services are many unregulated for-hire barge line companies operating on irregular schedules which handle a considerable amount of traffic to and from this important industrial area.

The foregoing is intended only to emphasize the importance of Pittsburgh district industry to the national economy and the importance of river transportation to that industry's continued survival.

Locks and dams were constructed on each of the district rivers in order to create navigable channels of sufficient depth to accommodate barge transportation and also to impound water to serve other important multipurpose uses. The failure of a single lock and dam structure would seriously disrupt the free flow of traffic with harmful effect on industrial production. Should the failure occur at a lock and dam through which local and interterritorial traffic must pass in significant volume many of the district major industrial operations would be forced to shut down because of the lack of fuel, supplies, and raw materials. Additionally, the impounded water would probably be released because of the failure and communities, mills, and factories would suffer severely because of the lack of water supply. The importance of this water supply to industry can well be illustrated by the fact that one large steel mill on the Ohio River in the Pittsburgh district normally uses about 360 million gallons per 24-hour day. This could be extremely disastrous at any time but even more so if the disruption occurred during a period of national emergency.

Ohio River locks and dams Nos. 7, 8, and 9, a short distance downstream from the city of Pittsburgh, which were constructed about 40 years ago, are not only inadequate and obsolete according to present-day navigational requirements but have deteriorated to such an extent that they cannot be expected to serve many more years without extensive and costly repairs. Lock and dam No. 7 presents more of a problem than do the other two structures because here the shore lock wall has moved riverward about 6 inches along its entire length of 600 feet and as a result is now approximately 4 inches out of plumb. Total collapse would cause the lock to be closed to navigation for several weeks and, if the lock gate recesses were also damaged, it might require a full year to make repairs. The condition of this unit is now so precarious that there is constant danger of failure, especially if it should be struck by a heavy tow of barges or suffer the ill effects of a severe flood. Now it so happens that this group of locks and dams is on a section of the Ohio River which constitutes the gateway through which all interterritorial traffic moving from and to the industrial heart of the Pittsburgh district must pass and which stretch of river also carries a huge volume of local traffic. Failure of one of these units would paralyze river traffic, shut off the flow of raw materials, and disrupt production at mills and factories and, of course, prevent the forwarding of finished goods to other parts of the country.

As long ago as 1944 the Corps of Engineers of the Department of the Army recognized the need for replacement of locks and dams 7, 8, and 9 but nothing could be accomplished at that time because of the war. However, in 1950 and again in 1952, the Corps of Engineers strongly recommended the complete abandonment of these three obsolete facilities and the replacement thereof with a modern lock and dam installation at New Cumberland, W. Va., about 57 miles below Pittsburgh. Not only would the proposed replacement structure at New Cumberland eliminate the hazards and threats of failure now existing but would also provide navigational improvements which would better serve river trans-

portation now and for a great many years in the future. In addition, and very importantly, there is the question of economy. No doubt it will take millions of dollars to keep the three aged and wornout locks and dams in operating condition during the next 10 or 15 years; money that could be more profitably used in the construction of a single modern facility that before too long will have to be provided anyway. Furthermore, the economy of operating 1 lock and dam instead of 3 such units is fairly obvious. For instance, a total of 54 men is needed for the operation of 3 locks and dams whereas only 18 men are required to operate 1. The reduction of 36 men in operating forces, figuring the earnings of each at $5,000 annually, would represent a savings of $9 million over a 50-year period and this amount combined with other operating savings and added to the millions that might have to be spent for the rehabilitation and repair of present structures would go a long way toward paying for the new lock and dam. And then, of course, the benefits accruing to river transportation operations by reason of navigational improvements should not be overlooked, benefits that would be reflected in lower operating costs and, in turn, make possible lower transportation rates for the public.

The contribution of river transportation to the Nation's peacetime economy is well recognized, but it is likewise of invaluable benefit in periods of national emergency. During World War II hundreds of naval and other deep-sea military craft were constructed at shipyards on the Ohio River above lock and dam No. 7 and floated to the Gulf of Mexico via the Ohio and Mississippi Rivers. A disruption which would have prevented the passage of those vessels would have been a serious blow to the war effort.

With the cost of running the Federal Government being such as it is today, we heartily subscribe to a program of economy wherever and whenever possible. However, we believe it is false economy to withhold the expenditure of money needed to keep in safe and efficient operating condition those improved rivers and facilities which have already been provided and contribute so greatly to the public welfare. If the inland waterway system is to serve its purpose, channels must be maintained, obstructions removed, navigation aids provided, and obsolete and inadequate lock and dam structures replaced. Private industry could not afford to keep spending money on wornout facilities when replacement and modernization are the inevitable and proper solutions from the standpoint of good business practice.

The United States engineers have stated that the construction of the New Cumberland lock and dam would require about 4½ years. Consequently, if construction were to be started this year it would not be completed and available for operation before 1958 at the earliest. Meantime, we would be hopeful that the three old locks and dams could be kept in serviceable condition pending completion of the new facility.

We have been informed that the cost of the replacement facility would be approximately $45 million which is indeed a lot of money but only 1 severe disruption in river traffic within the Pittsburgh area and the resultant stoppage of industrial production could easily cause losses amounting to as much or more than the entire cost of the new project.

We respectfully urge that your committee favorably consider making funds available immediately in order that this important project may be started promptly.

IMPORTANCE OF REPLACEMENT WORK

Mr. FRENCH. I would just like to highlight briefly. We are one of the larger common carriers operating on the Mississippi River system. I would like to comment concerning the vital importance of replacement work on the Ohio River dams 7, 8, and 9 with a single dam installation at New Cumberland, W. Va.

The Mississippi River and its tributaries form a net work of navigable streams called the Mississippi River system. It extends from the Appalachians to the Rockies and from the Canadian border to the Gulf of Mexico. It serves about 31 States and links most of the important Midwestern industrial and commercial centers. This waterway carried 33.5 billion cargo ton-miles in 1950 as against only 5.5

billion in 1931, an increase of more than 500 percent within a 20-year period. It is an important part of our national transportation system.

At the northeastern tip of the Mississippi River system is the so-called Pittsburgh district, roughly embracing the territory along the Ohio River above its mile point 109 and including areas adjacent to the navigable portions of the Allegheny and Monongahela Rivers. Considering only the channels with a minimum depth of 9 feet, the aggregate length of the Pittsburgh district rivers is only about 6 percent of the Mississippi River system as a whole, but in the year 1950 they carried approximately 28 percent of the total freight of the entire system.

INDUSTRIAL IMPORTANCE OF AREA

The Pittsburgh district ranks third in the Nation industrially and its products are of vital importance to the economic welfare of our country and to the national defense. Unquestionably this position of industrial eminence can be attributed largely to the availability and use of low cost river transportation. The 39 million tons of freight which moved on the local rivers in 1950 appears to be ample evidence of what this form of transportation means to our section of the country.

The iron and steel industry—a basic industry serving the Nation's requirements during peace and war—is heavily concentrated in the Pittsburgh district and depends to a considerable extent upon river transportation for the assembly of raw materials and the distribution of finished products. Although economy is one of the principal considerations, the steel companies realize that other methods of freight carriage could not possibly be relied upon to handle the incredibly large volume of tonnage needed to keep their plants in operation.

NATURE OF RIVER TRAFFIC

River traffic moving within the district is both of a local nature and of an interterritorial nature.

Manufacturers of other products likewise depend upon the waterways to serve their transportation needs involving the movement of a wide diversity of commodities and materials.

A great amount of traffic moving on the Pittsburgh rivers originates and terminates locally but industry is also benefited otherwise by being able to use river transportation for inbound and outbound interterritorial shipments which aggregate millions of tons annually. Local traffic consists predominantly of coal, coke, sand, and gravel, gasoline, oil, limestone, iron and steel articles and acids, all of which move in large annual tonnage volume.

Outbound interterritorial shipments are made up of iron and steel articles of various kinds, sulfate of ammonia, benzol, acids, gasoline and oil, cement, slag, machinery, newly constructed river barges, towboats, and other floating equipment, contractors' equipment, etc.

Inbound interterritorial movements involve gasoline, lubricating oil, heating oil, iron and steel scrap, sulfur, coal, coke, iron and steel articles of diversified nature, fluorspar, chemicals, acids, and many other things. The volume of interterritorial tonnage is enormous and moves throughout the year without seasonal interruptions.

BARGE LINE COMPANIES

The Pittsburgh district is served by many private and forhire barge line transportation companies, including three of the largest common carrier operators on the inland rivers and also a large contract carrier, all subject to the jurisdiction of the Interstate Commerce Commission. These carriers maintain regularly scheduled sailings to and from the local area, affording shippers frequent and dependable service between all points on the Mississippi River system and the Gulf Intracoastal Waterway without transfer or rehandling of the freight en route; in other words, the cargoes move from point of shipment to destination in the same barges into which they were originally loaded.

Barges are available for the handling of a wide variety of products; in fact, a suitable type can be provided for the accommodation of practically any kind of commodity. Covered barges are furnished for goods requiring protection from the elements; open barges are used for cargoes not susceptible to weather damage; and tank barges are supplied for bulk-liquid shipments.

Supplementing these services are many unregulated for-hire barge line companies operating on irregular schedules which handle a considerable amount of traffic to and from this important industrial area.

The foregoing is intended only to emphasize the importance of Pittsburgh district industry to the national economy and the importance of river transportation to that industry's continued survival.

EFFECT OF FAILURE OF LOCKS

Locks and dams were constructed on each of the district rivers in order to create navigable channels of sufficient depth to accommodate barge transportation and also to impound water to serve other important multipurpose uses. The failure of a single lock and dam structure would seriously disrupt the free flow of traffic with harmful effect on industrial production. Should the failure occur at a lock and dam through which local and interterritorial traffic must pass in significant volume many of the district's major industrial operations would be forced to shut down because of the lack of fuel, supplies and raw materials.

Additionally, the impounded water would probably be released because of the failure and communties, mills, and factories would suffer severely because of the lack of water supply. The importance of this water supply to industry can well be illustrated by the fact that one large steel mill on the Ohio River in the Pittsburgh district normally uses about 360 million gallons per 24-hour day. This could be extremely disastrous at any time but even more so if the disruption occurred during a period of national emergency.

My reason for stating that is that during the last war on the river above lock No. 7 hundreds of naval and deep-sea vessels were constructed and floated to the Gulf of Mexico via the Ohio and Mississippi Rivers.

PRESENT LOCKS OBSOLETE

Ohio River locks and dams Nos. 7, 8, and 9, a short distance downstream from the city of Pittsburgh, which were constructed about 40 years ago, are not only inadequate and obsolete according to present-

day navigational requirements but have deteriorated to such an extent that they cannot be expected to serve many more years without extensive and costly repairs.

Senator KILGORE. How long did you say?

Mr. FRENCH. About 40 years ago.

Lock and dam No. 7 presents more of a problem than do the other two structures because here the shore lock wall has moved riverward about 6 inches along its entire length of 600 feet and as a result is now approximately 4 inches out of plumb. Total collapse would cause the lock to be closed to navigation for several weeks and, if the lock gate recesses were also damaged, it might require a full year to make repairs.

Senator KILGORE. Along between New Cumberland and Steubenville it was built about 1914 or 1915?

Mr. FRENCH. You are talking about No. 10?

Senator KILGORE. Just below New Cumberland.

Mr. FRENCH. Just below New Cumberland.

Senator KILGORE. It was completed along in 1915, I believe it was.

Mr. FRENCH. Around that time.

CORPS OF ENGINEERS RECOMMENDATIONS

As long ago as 1944 the Corps of Engineers of the Department of the Army recognized the need for replacement of locks and dams 7, 8, and 9 but nothing could be accomplished at that time because of the war. However, in 1950 and again in 1952, the Corps of Engineers strongly recommended the complete abandonment of these three obsolete facilities and the replacement thereof with a modern lock and dam installation at New Cumberland, W. Va., about 57 miles below Pittsburgh. Not only would the proposed replacement structure at New Cumberland eliminate the hazards and threats of failure now existing but would also provide navigational improvements which would better serve river transportation now and for a great many years in the future.

In addition, and very importantly, there is the question of economy. No doubt it will take millions of dollars to keep the 3 aged and worn-out locks and dams in operating condition during the next 10 or 15 years, money that could be more profitably used in the construction of a single modern facility that before too long will have to be provided anyway.

REDUCTION IN PERSONNEL

Furthermore, the economy of operating 1 lock and dam instead of 3 such units is fairly obvious. For instance, a total of 54 men is needed for the operation of 3 locks and dams whereas only 18 men are required to operate 1.

Senator KILGORE. How much time is involved?

Mr. FRENCH. As it is now, practically every barge coming through it is a double tow. You have to split it. As you go down now you have 6 locks, and when you come back you have 6 locks. Each of those double lockings takes about an hour's time. So, in a downbound trip instead of 6 lockings you will have just 1.

The reduction of 36 men in operating forces, figuring the earnings of each at $5,000 annually, would represent a savings of $9 million over

a 50-year period and this amount combined with other operating savings and added to the millions that might have to be spent for the rehabilitation and repair of present structures would go a long way toward paying for the new lock and dam.

And then, of course, the benefits accruing to river transportation operations by reason of navigational improvements should not be overlooked, benefits that would be reflected in lower operating costs and, in turn, make possible lower transportation rates for the public.

We heartily subscribe to a program of economy in the operation of the Federal Government but believe it to be false economy to withhold the expenditure of money needed to keep in safe and efficient operating condition those improved rivers and facilities which have already been provided and contribute so greatly to the public welfare.

If the inland waterway system is to serve its purpose, channels must be maintained, obstructions removed, navigation aids provided, and obsolete and inadequate lock and dam structures replaced. Private industry could not afford to keep spending money on worn-out facilities when replacement and modernization are the inevitable and proper solutions from the standpoint of good business practice.

The United States engineers have stated that the construction of the New Cumberland lock and dam would require about 4½ years. Consequently, if construction were to be started this year it would not be completed and available for operation before 1958 at the earliest. Meantime, we would be hopeful that the three old locks and dams could be kept in serviceable condition pending completion of the new facility.

COST OF REPLACEMENT FACILITY

We have been informed that the cost of the replacement facility would be approximately $45 million, which is indeed a lot of money, but only one severe disruption in river traffic within the Pittsburgh area and the resultant stoppage of industrial production could easily cause losses amounting to as much or more than the entire cost of the new project.

We respectfully urge that your committee favorably consider making funds available immediately in order that this important project may be started promptly.

Senator YOUNG. Thank you very much for your testimony.

GASOLINE SHIPMENTS

Senator KILGORE. If we had slack water from the gulf to Pittsburgh, how much money would we have saved over rail haul in tank cars on the barge hauling of liquid fuels?

Mr. FRENCH. We did handle during the war a tremendous quantity of liquid chemicals.

Senator KILGORE. You do that year around, but I am thinking of all that which could be handled and without which the supply on the east coast was cut and made a critical situation both for the military and the civilian use.

Mr. FRENCH. I have not checked that.

Senator KILGORE. Do you know what your cost per gallon is? Is it not 1.3 mills from the gulf?

Mr. FRENCH. We do not submit our quotations in that fashion, but it is true that gasoline has moved on the river for as low as 2 mills a ton-mile, but that is a relative matter, it depends on the value of the dollar at the time and other circumstances. I would not be in a position to comment on that.

Senator KILGORE. I think the prewar cost was 1.3 mills per gallon.

Mr. FRENCH. That sounds pretty close.

Senator KILGORE. Barge was slightly higher than tanker, but much lower than pipeline or rail.

Mr. FRENCH. I might clarify that in view of your interest by saying that on steel, for instance, going from Pittsburgh district to Texas the cost of delivery via water is only half the cost of delivery by rail.

Senator KILGORE. How about billet steel going from Pittsburgh district to the ordnance plants?

Mr. FRENCH. Tremendous.

Senator KILGORE. And it is all heavy billet, too.

Mr. FRENCH. That is correct.

Senator YOUNG. Who is the next witness?

STATEMENT OF ROBERT E. REED, WHEELING, W. V.

OHIO RIVER LOCK NO. 7

Mr. REED. Mr. Chairman, I will be brief with my statement since Mr. French has covered most of it.

I am Robert E. Reed, a resident of Wheeling, W. Va., and an employee of the Wheeling Steel Corp. for 33 years, as captain, pilot, and for the past 12 years marine manager of the river fleet. I am familiar with the upper Ohio River and especially the conditions at lock No. 7 of the Ohio River. It has been sadly neglected due to the fact that the high hill, as you have noticed on the photo submitted to you, it has put a pressure on the lock wall and has moved it out somewhat into the lock.

There is danger of a total collapse. Should that occur, that inside lock wall would cause suspension of navigation in that district indefinitely.

Senator KILGORE. May I ask a question at that point? Is it not a fact that you have subsoil of fire clay there that causes the banks of the river to bulge all the time, and which has caused the Pennsylvania Railroad a tremendous loss? Unless you are able to put better foundations in the lock wall there will you not have that problem to contend with?

Mr. REED. Senator, I am not familiar with the soil there, but I am referring to the very high hill, and during the wet periods the tremendous pressure against the lock wall. That is the reason, as you will notice, that the lock has been neglected with the thought in mind that there would be a new lock provided at New Cumberland, W. Va., to remove the three old obsolete locks there now.

I do not want to take up too much of your time. I have a prepared statement to cover this project, and I wish to submit that for the record.

Senator YOUNG. That will be done.

(The statement referred to follows.)

STATEMENT OF ROBERT E. REED, MANAGER OF MARINE DEPARTMENT, WHEELING STEEL CORP., WHEELING, W. VA.

NEW CUMBERLAND LOCKS AND DAM, OHIO AND WEST VIRGINIA

The Ohio River is one of the most important inland waterways in this country, and it is the vital link between the industrial States of Pennsylvania, West Virginia, and Ohio and the South and Gulf ports. The products which it bears in great quantities are vital to the economic welfare of the country and to national defense. Tonnages of traffic have been constantly increasing. During 1951, 56,540,800 tons were moved a total of 9,760,267,500 ton-miles on the Ohio.

The iron and steel industry, which is a basic industry from the standpoint of our economic life and our national defense, is wholly dependent upon the Ohio River for any water transportation. Steel-product operations below Pittsburgh receive practically all of their requirements of coking coal in barges on the Ohio River, and much of its fluorspar, sulfur, and other important operating supplies are delivered in the same manner. Great tonnages of coal, oil, and gasoline also move northbound into the Pittsburgh district.

This dependence on river transportation is not merely a matter of operating economy. Other means of transportation could not begin to supply the large tonnage requirements of the steel producers. For example, the Wheeling Steel Corp. gets all of its coking coal from Harmarville, Pa., on the Allegheny River, and the river barges provide the only adequate means for moving this coal down the Allegheny and Ohio Rivers to the coking plant at Follansbee, W. Va. It seems likely that we shall be moving about 2,400,000 tons down the river each year. Our barges travel about 80 miles on the Ohio and Allegheny Rivers, passing through locks 7, 8, and 9 daily. It would not be possible to move this amount of coal by any other transportation facilities now available.

These locks and dams, (i. e., Nos. 7, 8, and 9,) are a short distance downstream from the city of Pittsburgh. They were constructed about 40 years ago and are not only inadequate and obsolete according to present-day navigational requirements but have deteriorated to such an extent that they cannot be expected to serve many more years without extensive and costly repairs.

Lock and dam No. 7 presents more of a problem than do the other two structures because here the shore lock wall has moved riverward about 6 inches along its entire length of 600 feet and as a result is now approximately 4 inches out of plumb. Total collapse would cause the lock to be closed to navigation for several weeks or months and, if the lock gate recesses were also damaged, it might require a full year to make repairs. The condition of this unit is now so precarious that there is constant danger of failure, especially if it should be struck by a heavy tow of barges or suffer the ill effects of a severe flood.

It so happens that this group of locks and dams is on a section of the Ohio River which constitutes the gateway through which all interterritorial traffic moving from and to the industrial heart of the Pittsburgh district must pass and which stretch of river also carries a huge volume of local traffic. Failure of one of these units would paralyze river traffic, shut off the flow of raw materials, and disrupt production at mills and factories and, of course, prevent the forwarding of finished goods to other parts of the country.

As long ago as 1944 the Corps of Engineers of the Department of the Army recognized the need for replacement of locks and dams 7, 8, and 9 but nothing could be accomplished at that time because of World War II. However, in 1950 and again in 1952, the Corps of Engineers strongly recommended the complete abandonment of these three obsolete facilities and the replacement thereof with a modern lock and dam installation at New Cumberland, W. Va. (about 50 miles below Pittsburgh and about 40 miles above Wheeling).

Not only would the proposed replacement structure at New Cumberland eliminate the hazards and threats of failure now existing but would also provide navigational improvements which would better serve river transportation now and for a great many years in the future. In addition, and very importantly, there is the question of economy. No doubt it will take millions of dollars to keep the three aged and wornout locks and dams in operating condition during the next 10 or 15 years, and this money could more profitably be used in the construction of a single modern facility that before too long will have to be provided anyway. Then, too, the economy of operating 1 lock and dam instead of 3 such units over a period of years is fairly obvious.

The Army engineers have stated that the construction of the New Cumberland locks and dam would require about 4½ years. Consequently, if construction were to be started this year, it would not be completed and available for operation before 1958, at the earliest. Meantime, we would be hopeful that the 3 old locks and dams could be kept in serviceable condition pending completion of the new facility.

As indicated above, the proposed New Cumberland locks and dam would replace existing obsolete locks and dams Nos. 7, 8, and 9, but would also provide a deeper, more stable, pool in this area and would require only 1 lockage in lieu of 3 lockages for through traffic moving in this reach of the river. This would result in substantial savings in transportation cost.

We have been informed that the cost of the replacement facility at New Cumberland would be approximately $45 million, which is, indeed, a lot of money, but only one severe disruption in river traffic within the Pittsburgh area and the resultant stoppage of industrial production could easily cause losses amounting to as much or more than the entire cost of the new project.

We respectfully urge that your committee favorably consider making funds available immediately in order that this important project may be started promptly.

PITTSBURGH COAL EXCHANGE, PITTSBURGH, PA.

STATEMENT OF DAVID MATHEWS, JR., SECRETARY-TREASURER

GENERAL STATEMENT

Mr. MATHEWS. Mr. Chairman, my name is David Mathews, Jr., and I am secretary-treasurer of the Pittsburgh Coal Exchange, which represents the steel companies, gravel companies, dredging companies, chemical companies, bargelines, and power companies of the Pittsburgh area. Our members are, for example, the United States Steel Corp., Jones & Laughlin Steel Corp., Pittsburgh Steel Co., Armco Steel Corp., companies like that who ship about 40 million tons a year in the Pittsburgh district.

At the present time we are moving 1 million tons a month through those locks that you have seen in your photographs. In order to definitely establish what we must face in the future I went to the district engineer in Pittsburgh, from there to the division engineer in Cincinnati, and then to the Chief's Office in Washington. The figures I was able to get, the facts and figures, are that it will cost about $17 million to put the present locks and dams in a fairly good working condition.

Senator YOUNG. What was that figure?

Mr. MATHEWS. About $17 million, actually $16,910,000; $9,210,000 for lock 7, $3,867,000 for lock 8, and $3,847,000 for lock 9, or a total of $16,910,000. If you were to spend that much money, you would still have locks that were running only half big enough for modern tows.

When I went to visit the Army engineers, I tried to determine just how long the life expectancy of the present lock 7 is. Since it will take 5 years to build the new Cumberland Dam, we were fearful that lock 7 might fail. The Army engineers could not give me any assurance that the wall at No. 7 will not collapse within the 5-year period required to build this lock and dam.

The dams were built in the period from 1904 to 1914, and they are just obsolete as well as worn out. We urge upon Congress that the appropriation be made this year to start construction.

Mr. Chairman, I have beside my statement also a prepared statement from the Propeller Club of the United States, which I would like to have inserted in the record.

Senator YOUNG. That will be done.
(The statements referred to follow:)

STATEMENT OF DAVID MATHEWS, JR., SECRETARY-TREASURER, THE PITTSBURGH COAL EXCHANGE, REGARDING NEW CUMBERLAND DAM, OHIO RIVER

My name is David Mathews, Jr., secretary-treasurer of the Pittsburgh Coal Exchange, which was organized in 1870 and has, since that time, represented the leading steel corporations, coal companies, barge lines and sand and gravel companies in the Pittsburgh district. Our members, who are listed on the attached letterhead, ship some 40 million tons annually by river in the Pittsburgh district.

We consider the proposed New Cumberland Dam on the Ohio River, which will be a replacement for existing locks and dams Nos. 7, 8, and 9 to be the most important and vitally necessary river project in the Nation, first because of the emergency nature of the project and secondly because of the important tonnage it will accommodate.

The existing dams were built during the period from 1904 to 1914 and are not only worn out but have outlived their usefulness. They are in such deplorable condition that complete failure is imminent at all times. The pictures which accompany this statement will bear out that remark. The wall at lock 7 has been moving for some time. Its eventual failure is absolutely certain. Just when it will occur is guesswork. Since it will take at least 5 years to build the New Cumberland Dam, we are justifiably concerned that failure will occur before the new dam is built. To wait any longer to begin construction is to invite disaster, because there will most certainly be a stoppage of traffic on the Ohio River for a long period of time. We believe it would be false economy to attempt to repair the present locks. The most conservative estimates of putting them in reasonably safe condition, not even first-class condition, amount to $17 million. The common practice in the area, both upstream and downstream, now includes tows up to 22 barges in size. They cannot be handled in an efficient manner through the old locks. The ever-increasing tonnage through the area demands that more modern and larger facilities be provided.

The new dam will impound a pool 22.7 miles in length and will provide two sets of locks, the larger being 1,200 feet long and 110 feet wide and the smaller 600 feet long and 110 feet wide. These will accommodate a tow of 22 barges, each 26 feet wide and 175 feet long, with a cargo of some 22,000 tons at a draft of 8.5 feet. The new dam was proposed first in 1944 when the tonnages through the locks were little more than half that at present, as shown by the following:

Ohio River	Year 1944	Year 1952
	Tons	*Tons*
Lock 7	7,406,300	11,928,245
Lock 8	5,412,320	10,557,850
Lock 9	,126,025	8,631,800

The sharp upward trend of traffic more than justifies the necessary expenditure of funds. There is a balanced reciprocity of trade between Pittsburgh and southern ports. The upstream tonnage equals that downstream and the sharpest increases have been in chemical and petroleum products. It is well to remember the vital part of the Ohio River during World War II in the movement of petroleum products to the North and East during the submarine menace at sea. This tonnage has not lessened since the war, but has doubled. The movement of such tonnage again in a national emergency is a vital necessity to this Nation. Such traffic could move more quickly and more economically through the proposed modern structure than through the old locks with their danger of failure. Should the inland shipbuilding program again become necessary, the burden on existing locks and dams coupled with the natural increases in traffic would most certainly result in failure.

New Cumberland Dam will replace three worn-out structures with their high maintenance costs. Modern engineering and construction methods together with better materials will provide a structure which can last almost indefinitely. The estimated costs over a 5-year period are as follows:

Previous appropriation for plans	$229,000
1st year construction	2,000,000
2d year construction	10,000,000
3d year construction	16,500,000
4th year construction	12,500,000
5th year construction	4,371,000
Total	45,600,000

The estimated cost of placing existing structures in reasonably good serviceable condition:

Lock and dam:	*Amount*
7	$9,210,000
8	3,860,000
9	3,840,000
Total	16,910,000

It can readily be seen from the above facts and figures that the existing locks and dams are rapidly approaching their end, which is to be expected after some 45 to 55 years of use. It would be poor economy to spend some $17 million to patch up and repair locks and dams which are obsolete and not capable of handling modern tows and do not fit in with modern transportation efficiencies and mode of operation.

Full economic realization of a modern integrated transportation system will not be possible until these antiquated locks and dams are replaced. They are holding back progress in waterways traffic. They are inadequate for present needs and cannot hope to cope with future traffic. They will constitute a bottleneck in a national emergency. On the other hand, New Cumberland will be completely modern, will have a much longer life expectancy at much lower maintenance costs. The assured traffic which must of necessity pass through it more than justifies construction.

THE PROPELLER CLUB OF THE UNITED STATES,
Port of Pittsburgh, May 18, 1953.

Hon. WILLIAM KNOWLAND,
United States Senator, Chairman, Subcommittee on Civil Functions, Committee on Appropriations, United States Senate, Washington, D. C.

DEAR SIR: The Propeller Club of the United States, port of Pittsburgh, is composed of members representing industries utilizing the rivers and a large number of businesses vitally interested in river transportation on the Mississippi River system in general, and the Monongahela, Allegheny, and Ohio Rivers in particular. I, as chairman of the rivers and harbors committee of this organization, have been directed to write you and other members of your subcommittee to inform you the necessity this organization feels for proceeding immediately with the construction of a new lock and dam on the Ohio River at New Cumberland, W. Va., This new lock and dam to replace the present locks and dams Nos. 7, 8, and 9.

The existing structures at Nos. 7, 8, and 9, are not only inadequate for modern river transportation but are between 45 and 55 years old and have deteriorated to the extent that failure has become an ever-present possibility. Such a failure would be calamitous to the large steel and power plants situated downstream on the Ohio River below these locks and dams. Photographs of these structures showing the terrible condition to which they have deteriorated are herewith submitted to your committee.

The estimated cost to repair the existing structures is approximately $17 million. Since the proposed new lock and dam at New Cumberland would replace 3 locks and dams, labor operating costs would be reduced to approximately one-third of the labor cost of now operating the existing 3 locks. We do not have figures to show what these savings would be but understand during the useful life of the new lock and dam at present rates of pay it would at least equal the estimated cost to repair the existing structures. To spend the above amount of money on these old structures seems to us would be a waste of money.

Tonnage passing through locks 7, 8, and 9 has increased tremendously since the war. The tonnage passing through lock No. 7 for instance in 1944 was 7,500,000 tons, in 1952 it was 12 million tons. It is obvious what the effect would be, should this dam fail, upon industries depending upon coal for operations which

is transported by river from the Monongahela and Allegheny Rivers and which must pass through this lock.

In addition to coal, large tonnages of steel products from the Pittsburgh district are transported south. A great volume of gasoline and oil is moved north upstream to the Pittsburgh district. In recent years in addition to the downstream movement of coal a considerable tonnage is also brought upstream from the Huntington, W. Va. district. Locks and dams Nos. 7, 8, and 9 are vital links in this transportation system and failure of any one of them would create a chaotic condition in the procurement by industry of the vital supplies now transported over this system.

We have referred to possible failure of the existing structures a number of times. We regret being repetitious but the fear of such failure is the principal motivating factor influencing us in stressing the urgency for replacing the existing facilities with the New Cumberland lock and dam, especially when we consider the time element involved. It is estimated the new lock and dam could not be constructed and placed in operation in much less than 5 years if begun now.

The Propeller Club, port of Pittsburgh, has given this project serious study and consideration and for the reasons given above respectfully urges that Congress appropriate the necessary funds to begin immediately the construction of the New Cumberland lock and dam on the Ohio River.

Very truly yours,

PROPELLER CLUB, PORT OF PITTSBURGH,
W. J. KELLY,
Chairman, Rivers and Harbors Committee.

UNION BARGE LINE CORP. AND NATIONAL STEEL CORP.

STATEMENT OF JOHN E. LAUGHLIN, JR., COUNSEL

PREPARED STATEMENT

Mr. LAUGHLIN. Gentlemen, my name is John E. Laughlin, Jr., of Pittsburgh, and I am counsel for the Union Barge Line Corp. and the National Steel Corp. I have submitted a statement to the committee to which I have attached photographs showing the condition of these locks and dams, and I would like that to be made a part of the record.

Senator YOUNG. The statement will be made a part of the record. You understand that we cannot insert the pictures.

Mr. LAUGHLIN. I appreciate that.

(The statement referred to follows:)

NEW CUMBERLAND LOCKS AND DAM, OHIO RIVER

SUMMARY

The project: To construct a new dam and two modern locks on the Ohio River at New Cumberland, W. Va., to replace three locks and dams, of obsolete design (erected between 1911 and 1914), between Midland City, Pa., and New Cumberland.

Expected cost: In the fiscal year 1953–54, between $2 million and $3 million. Total cost to 1958–59, approximately $43 million.

Reason: Existing facilities are in a very hazardous condition, especially lock 7 which is falling along the entire length of one wall. A major failure could close navigation along this highly industrialized section for periods up to a year, with a loss of 12 million tons of coal, steel, gasoline, oil, and other essential commodities. Steel and power plants would be seriously crippled.

Alternative: Repair existing facilities at a cost of $17 million, which would simply perpetuate obsolete navigation aids.

Authorization: Not needed.

BACKGROUND

From almost every significant point of view, the Ohio River is one of the most important inland waterways of the world. It is the vital link between the northern industrial States, such as West Virginia, Pennsylvania, and Ohio, and the South and southern gulf ports. The products which it bears in vast quantities are vital to national defense and to the economic welfare of the country; among these are fuel oil, gasoline, and other petroleum products; iron and steel; coal and coke for the manufacture of iron and steel; sulfur; sulfuric and other acids; fluorspar; benzol; toluol; limestone; and iron and steel scrap. Tonnages of traffic are immense and have been constantly increasing. For example, in 1945 annual tonnage was about 34 million; in 1950 it approached 50 million tons.

The iron and steel industry—a basic industry from the standpoint of national defense and economic welfare—is wholly dependent upon the river transportation via the Ohio River. Steel manufacturers at Pittsburgh, Pa., Weirton, W. Va., Stubenville, Ohio, Wheeling, W. Va., Ashland, Ky., and Portsmouth, Ohio, use the river extensively to ship their finished products. The heavy concentration of steel production below Pittsburgh receives practically all of its requirements of coking coal in barges which traverse the Ohio and much of its limestone and other important operating supplies is delivered in the same manner. Moreover, their dependence upon river transportation is not merely a matter of operating economy; if river shipments should be halted for any appreciable length of time, other methods of freight carriage could not begin to supply the incredibly large tonnage requirements of the steel producers. For example, a single steel producer on the Ohio brings in almost 2,500,000 tons of coking coal a year for its blast furnaces; it would require at least 60,000 railroad cars to move that quantity of coal.

Several important river carriers operate regular schedules on the Ohio River; among them, to mention only a few large operations, are Union Barge Line Corp., American Barge Line Co., and Mississippi Valley Barge Line Co. Private carriers are equally active, in that almost all of the steel producers and many coal companies move their own barges, laden with coal and other raw materials and finished products.

Other manufacturers in Pennsylvania, West Virginia, Ohio, and Kentucky, such as steel fabricators, are also dependent upon river transportation for various raw materials and operating supplies such as steel, coal, and fuel oil. Moreover, these smaller segments of industry ship substantial amounts of package freight by water carriers to points on the Ohio, Mississippi, and Missouri Rivers and the gulf ports.

THE PROJECT

All of the coal and other raw materials for steel which move from the mines and other sources of supply above and around Pittsburgh to the important steel-producing areas on the Ohio River in West Virginia and Ohio must pass through Ohio River locks and dams 7, 8, and 9 located between Midland City, Pa., and New Cumberland, W. Va., a distance of about 10 river miles. The same is true of important finished products manufactured in the industrial sections of Pennsylvania, of fuel oil and other operating supplies moving northward to such sections and of other commodities which are transported in both directions. Three major steel producing companies have important iron and steel plants in the area. One large powerplant is wholly dependent upon coal moving through all three locks and dams. The United States Air Force has fuel storage facilities below the Montgomery locks which receive their supplies over this section of the Ohio. These locks and dams are, therefore, the keys to navigation in the area and any interruptions to service through them would paralyze commerce and production in one of the most important industrial centers of the United States.

Over 12 million tons of traffic pass through lock 7 in a single year. In 1951, there were 1,200,000 tons of iron and steel, 2 million tons of gasoline and oil, 5,500,000 tons of coal and coke, 2,200,000 tons of sand and gravel. In 1952, 34,000 river craft passed the site. In just 1 month of 1950, lock 7 locked through 595 separate tows, made up of 3,141 river craft. These statistics, selected more or less at random, provide conclusive proof of the vital importance of these navigation facilities from the standpoint of normal economic welfare and national defense.

The inadequacy of these locks and dams—which were installed over 40 years ago and which are obviously obsolete when compared with other navigation

facilities on the Ohio—was recognized by the Corps of Engineers of the Department of the Army as early as 1944. However, nothing could be done at that time because construction work of this type was virtually suspended because of the war. Later in 1950 and again in 1952, the corps did present data and plans for the replacement of these 3 obsolete facilities with a single modern installation of a dam and 2 locks at New Cumberland, W. Va., and it is the object of this statement to indicate briefly the reasons for supporting the project.

The existing locks and dams are entirely obsolete with respect to present river traffic conditions for several reasons. In the first place, at each installation there is only one lock with no provisions for emergencies. In the second place, each lock is only 600 feet long, which is not sufficient to handle modern tows which in turn means that tows must be broken up—a procedure which delays and endangers the movement. Thirdly, the existing wickettype dams present operating difficutlies in bad weather and under ice conditions. And finally, navigation is obviously hindered by requiring lockage through 3 sets of locks, when only 1 lockage should be needed.

These factors—and perhaps others—have no doubt been emphasized by the proponents of the project, because the proposed locks and dam at New Cumberland, W. Va., will provide modern facilities which will eliminate all of the disadvantages of the present arrangements and permit more economical operations on the river by carriers and other users, with like economies to the Government in its operation of navigation aids. These same factors, under normal conditions, should be sufficient to justify the project, but it is recognized that, in the present state of the economy, any so-called new project requires better justification than the fact that it is desirable from an economic viewpoint. It is, therefore, appropriate to consider the fact that this is not a "new" project and that its approval is not merely a matter of economic desirability.

REASONS FOR APPROVAL

The systematic and orderly improvement of navigation facilities on the Ohio River, to meet the needs of increasing traffic, is an established policy. It has been in effect for many years. As a matter of fact, the proposed project has been authorized under the River and Harbor Act of 1909, so that additional authorization is not needed. Considering the past history of Ohio River improvements, it would be absurd to consider the project as a "new" development, which might be the case, for example, if there was a request to build a new canal or to develop navigation facilities on a previously nonnavigable river or section of a river.

This point is emphasized if we examine the fundamental reason for the project. Locks 7, 8, and 9 are inadequate, not only because they are locks of limited length, but also because they are in deplorable condition from an operating point of view. It is possible that any one of them may have to be closed for repairs at any time because of a major failure, which would be absolutely disastrous for the essential traffic which moves through these sections of the Ohio River and this danger is particulary acute at lock 7 where the landward lock wall has been moving toward the river. At the present time, the entire length of the wall (600 feet) has moved almost 6 inches, with the result that it is about 3⅞ inches out of plumb. A total collapse would of course close the lock to navigation for at least 6 weeks and, if the gate recesses were damaged, for perhaps a full year. If the maximum damage occurred, there would be no adequate substitute methods of transportation to handle the 12 million tons which traverse this carrier and water carriers would have to suspend business completely.

It is not our intention to predict that such a disaster may occur this year or next; we do believe, however, that the condition of these locks and dams is such that if the new project is begun immediately and completed in 1958, 5 years from now, we will have stretched our margin of safety to the limit. As a result, each year of delay in the approval of the project increases the hazard to navigation to the breaking point. One only need examine the photographs attached to this statement to realize that all three facilities are now in hazardous condition.

Moreover, it is no answer to say that the hazard can be overcome by extensive interim repairs to existing dams. Such repairs will be very costly, about $17; they will not delay for very long the need for replacing the repaired facilities and, in the interim, shipping on the Ohio River will suffer not only the dis-

advantages of obsolete navigation facilities but also the costs of delays arising from repair work. It would not make sense to spend $17 million to provide facilities which, because of their inadequacy, would not be built today.

The deterioration problem on these obsolete facilities is indeed acute. Repair is not the solution, because it would be costly, not only to the Government, but also to the shippers and taxpayers. Delay is not the answer, as it would be with respect to a wholly new project, because, on the Ohio River, the replacement of worn-out facilities, in accordance with a previously established policy of providing navigation aids to meet current traffic conditions, is a matter of maintenance rather than the creation of a new program.

The cost of the project will be substantial—more than $40 million—but spread over 5 years, appropriations will not be significant items in the overall budget; $ million to $3 million would suffice for the coming fiscal year. And a single serious breakdown on the Ohio might conceivably cost shippers, carriers and producers a loss equal to the entire cost of the project.

The Corps of Engineers has made an exhaustive study of this project and of the hazards inherent to the continuation of existing, obsolete facilities. It seems safe to assume that it would confirm the statements made above, if requested to express its views on the subject.

NOTE.—This copy does not include photographs referred to in the text.

ECONOMIC BENEFITS

Mr. LAUGHLIN. I wish to amplify that statement along the line of the argument which Mr. French has presented to you. Normally most of these river projects are approached from the standpoint of economic benefit, and I think that the economic benefit in this case is obvious, because as Mr. French pointed out, the replacement will eliminate five lockages, which is of course a very important factor to shippers on the river. However, I think that the really significant point in this project is not its economic desirability but its actual necessity.

Mr. French has told you, and so has Mr. Reed of their impressions as to the conditions of these locks and dams. They base their judgment on what they know as operators through these locks and dams.

The chairman will find in the record that we have also submitted a statement by Mr. G. C. Taylor, president of the Mississippi Valley Barge Line Co., another river carrier in this area. His statement has attached to it a report prepared by independent engineers, and that report if examined will verify Mr. French's statements, Mr. Reed's statements, and my own.

Senator YOUNG. Do you wish to have that in the record?

Mr. LAUGHLIN. I would also like to have that in the record, Mr. Chairman.

Senator YOUNG. That will be done.

(The statement referred to follows:)

STATEMENT OF G. C. TAYLOR, PRESIDENT, MISSISSIPPI VALLEY BARGE LINE CO., WITH RESPECT TO PROPOSED NEW CUMBERLAND LOCKS AND DAM ON THE OHIO RIVER

Mississippi Valley Barge Line Co. is a common carrier. It provides a general transportation service on the Mississippi River system, including the Ohio River as far north as the Pittsburgh industrial area. Its operations on the Ohio River offer to the public frequent service, upstream and downstream to and from Pittsburgh. During the year 1952 the company averaged better than 2 tows a week in each direction for a total of 228 movements involving 779 barges moving up the river and 818 barges downstream.

The foregoing movements passed through existing locks 7, 8, and 9 on the Ohio River which locks would be replaced by the proposed new locks and dam

at New Cumberland, W. Va. Substantially all the raw materials and commodities which the company transports through these facilities are vital to the economic welfare of the country and to its national-defense program. For example, we move large quantities of coal, fuel oil, fluorspar, and scrap for the iron and steel industry and other important raw materials for other manufacturers. Gasoline, benzol, alcohol, and sulfur are also transported in large quantities. Another important item of freight consists of various finished iron and steel products shipped from Pennsylvania steel producing centers to many points along the Mississippi River system. During the year 1952 this company alone carried, through locks 7, 8, and 9, 881,000 tons of freight, of which 533,000 moved upstream and 348,000 downstream. Other water carriers, private and common, handle the same types of freight in bulk quantities through the same area.

Under normal conditions, the advisability of constructing improved navigation aids is determined by economic factors. There is a complete justification for the New Cumberland locks and dam project on this basis because it will serve to substitute a single modern facility for three obsolete locks and dams at a substantial reduction in operating and maintenance costs. Moreover, it will provide obvious economic advantages to shippers and carriers. However, our interest in the proposed project is not predicated on any economic advantage to our company; we believe the new facility is urgently needed to correct a dangerous situation which might conceivably cause the suspension of all river traffic in the area for a long period of time. We know that locks 7, 8, and 9, and particularly lock 7, are in bad condition. Unless immediate and very expensive repairs are undertaken, a major failure at any one of the locks is a decided possibility.

We know from our own experience through these locks that the views which we have expressed with respect to their condition are not in the least exaggerated. However, in order to obtain an independent opinion, not colored by any self-interest, we have retained the engineering firm of Sverdrup & Parcel, Inc., of St. Louis to make an independent examination of the locks. A copy of their report dated May 6, 1953, is attached to this statement. It should be noted that this report confirms the fact that the landward lock wall at dam No. 7 is out of plumb and that there is land slippage above it. The report also comments on the general bad condition of the concrete at all of the dams and to this we may add that there is only one lock at each of the dams so that if a lock failure should occur, traffic would be completely stopped unless the accident occurred at a time when the navigation pass was available.

SVERDRUP & PARCEL, INC.,
St. Louis, Mo., May 6, 1953.

MISSISSIPPI VALLEY BARGE LINE CO.,
St. Louis, Mo.

(Attention Mr. G. C. Taylor, president.)

GENTLEMEN: In compliance with your letter of April 27, 1953, we have just completed an inspection of Ohio River locks and dams 7, 8, and 9.

For the reasons set out hereinafter we believe that you are adequately justified in the interest of navigation as a whole and by your own activities in urging responsible agencies to proceed as rapidly as possible with the construction of a new lock and dam.

The locks and dams in question were constructed during the period 1904 to 1914. The locks are 110 feet wide and 600 feet long between the sliding-type gates. Each dam has 2 beartrap weirs 91 feet in width for control of the water. There is a navigable pass 600 feet wide through dams 7 and 9 and one 700 feet wide through dam 8. The navigable pass through the dams is shut off during periods of normal flow by a series of wickets and is left open for navigation during periods of high water. The lift at dam 7 is 6.9 feet, at dam 8 the lift is 6.4 feet, and at dam 9 the lift is 7.4 feet.

Dam 7 is located 36.5 miles below the head of the Ohio River, and dams 8 and 9 are located 46.4 and 56.1 miles, respectively, below the head of the river. These dams are operated and maintained under the jurisdiction of the district engineer, Pittsburgh district of the Corps of Engineers, United States Army, located in the Federal Building at Pittsburgh, Pa.

The guide walls and lock walls are constructed of mass concrete. Over wide areas the concrete has eroded away to a depth of a foot, and in some instances the holes extend through the wall, which is approximately 5 feet thick at the elevation of the most severe damage. There are no visual signs of any reinforc-

ing steel in this concrete. The wickets were down at the time of the inspection and the river stage was approximately 12 on the various gages. This permitted a detailed inspection of a considerable portion of the upper guide walls and the walls within the lock chambers.

The elevation of the most severe damage is the elevation of the water when the dam wickets are up, and the deterioration of the concrete appears to be occurring at a rapid rate. It was found at a number of places that pieces of concrete could be readily pried off with a pocket knife, even though some of the concrete appears to be in sound condition below the surface. It appears that the increased rate of deterioration with the resultant increase in the annual maintenance cost has forced the postponement of needed repairs during the last few years and in general, the structures have an appearance of neglect.

We were told by the personnel at the dams that the wickets and the beartraps in the dam are in general the original ones. These are constructed of timber with metal hardware. They have been in place now for approximately 40 years and, from the wickets that we were able to inspect, a large number will have to be replaced each year in the near future. The timber portion of the wickets below the water may be in good condition. The failures in the wickets occurs near the top where the timber is subject to alternate wetting and drying.

At dam 7 there appears to have been slippage of the hillside above the landward lock wall. There are a number of visual indications of this movement. The bank paving above the wall has buckled in a number of places and the lock wall is out of plumb and out of alinement. There is a railroad on the hillside above this wall and the powerhouse and dwellings associated with the lock and dam are in the area of slippage.

There is only one lock at each of the dams, and during the periods when the locks are repaired, it is necessary to close the river to traffic except for short periods each day when the wickets are lowered and the navigation is permitted to pass the dam. Ordinarily an effort is made to accomplish the repairs during the periods of moderate high water so that the wickets may be left in the lowered position and the river traffic may use the open river navigation pass. It is difficult to obtain a balanced condition when the navigation pass is open as there is always the possibility that high water wil lovertop the locks, which extend only a few feet above the normal pool level, and it becomes necessary to discontinue the repair work.

The machinery associated with the locks is in general more than 40 years old and of an obsolete type that may have to be replaced in the near future because of the difficulty of obtaining or making repair parts. The cost of making periodic repairs and repair parts will soon be more expensive than replacing the machinery.

The existing rolling lock gates are badly corroded due to the difficulty of maintaining them below the water surface and in the areas where they are alternately wet and dry. These have been in place some 40 years, and it will be necessary to make an increasing number of periodic repairs and eventually it will be more economical to renew them than to continue to make extensive repairs.

PROPOSED NEW CUMBERLAND LOCKS AND DAM

The Corps of Engineers, United States Army have recommended as an economy measure that the existing locks and dams 7, 8, and 9 be replaced by a single modern dam and two locks at New Cumberland, W. Va. The site of the proposed dam is 54.4 miles below the head of the Ohio River and a short distance above lock and dam 9.

One lock at the proposed dam would be the same size as the locks in the existing dams and the other would be twice as long. As you well know, this long lock, which would be 110 feet wide and 1,200 feet long, is large enough to handle modern size tows without breaking them. The dam as proposed would be of the gate type with several submergible lift gates for the passage of ice and drift. This type of dam requires that all tows pass through the locks, but the total number of lockages per year will be less than if the present three dams are retained.

ADVANTAGES OF PROPOSED NEW DAM

The proposed new dam would offer several advantages not obtainable by continued use of the existing wicket dams.

First, it permits ready maintenance of a dependable year round minimum pool elevation.

Second, the gates may be operated under all weather conditions from a bridge above high water and ice flows with a minimum hazard to personnel.

Third, there is a reduced bottom drag on the tows because of the increased depth of water over a large part of the waterway.

Fourth, the average time for passage through this reach of the river will be less because of a reduction in the number of lockages.

CONCLUSIONS

If the progressive breakdown of the concrete walls is to be checked and the structural stability of the walls is to be maintained, a large portion of the walls should be faced with new reinforced concrete. This work of facing the walls with new concrete would eventually have to be extended to all of the concrete surfaces including the piers adjacent to the beartrap weirs. The concrete facing would reduce the present lateral clearances. We must point out that the life of the repaired walls would not be equal to that of new walls.

In order that the ground slippage adjacent to lock 7 be stopped, we are of the opinion that a large portion of the earth surcharge behind and above the wall must be removed, that a subsurface drainage system must be installed, and that the buildings in this area would have to be removed or reconstructed at other locations. This work would be an expensive undertaking, but we believe that it would be required to insure the future stability of the lock wall.

No detailed comparative estimates of cost of repair or replacement have been made, but it is evident that the annual costs for maintaining a single new dam at New Cumberland would be considerably less than the cost of maintaining the existing three dams. The number of men required to maintain a 24-hour watch at the new dam would be about one-third the number presently required or a reduction of 36 men.

It is our opinion that the annual cost of maintaining the existing three locks and dams will increase rapidly during the coming years, and it is only a matter of time until these costs will more than compensate for the construction of a new dam. It is also our understanding that the Corps of Engineers has already shown that the cost of a new dam and maintaining such dam will be less than the cost of maintaining the existing three dams plus the additional benefits that may be derived from such new structure. This differential between the cost involved in a new structure and the costs involved with the old structure will increase in favor of the new structure rapidly with the passage of time.

Very truly yours,

G. WOOD SMITH, *Vice President.*

PRESENT CONDITION

Mr. LAUGHLIN. I do not think that there is any question but that these locks and dams are in a hazardous condition. Lock 7, as Mr. French has pointed out, has moved 6 inches toward the river and is 4 inches out of plumb. There is pressure behind that lock wall, and if it should fail, it would cause a minimum interruption of 6 weeks. If the lock sill should be damaged, it would cause an interruption of 1 year.

Now this particular area is the connecting point between the steel-producing areas of Pittsburgh and the South. If traffic should be suspended on this section of the river for 1 year, it would mean that river traffic from Pittsburgh would be completely disrupted. Now let us think of that in terms of the kind of products which move through these locks and dams.

Senator YOUNG. One million tons a month?

Mr. LAUGHLIN. At least 1 million tons a month, and it is not so much the tonnage, Mr. Chairman, as it is the type of tonnage that moves through.

SHIPMENTS IN 1951

In 1951 there were 1,250,000 tons of iron and steel products, 2 million tons of gasoline and oil, 5,500,000 tons of coal and coke, 2,200,000 tons of sand and gravel. A great many steel industries in the Wheeling area at Weirton, Steubenville, and so forth, depend entirely on the river for the coking coal which moves down the river. By the same token one steel producer above this area depends to a large extent upon coal from southern West Virginia for its steelmaking operations. If you shut off these supplies of coal, there would be absolutely no way to deliver them to the mill. The rail carriers could not possibly absorb the burden because there just are not that many railroad cars available. The same is also true of fuel oil. The mills above this area in Pittsburgh depend largely on the river for the fuel oil which they use in their operations.

There again, if you shut off that supply of fuel oil, there would be no way of replacing it. The same thing also applies to the traffic in iron and steel. A great deal of this steel moves along to fabrications along the Ohio and Mississippi Rivers. If you shut off that supply, there would be no way of moving that steel. So that all in all, Mr. Chairman, I think if you will analyze this situation, you will find that this is not merely an economic matter but it is an actual necessity.

Senator YOUNG. Thank you, sir.

Mr. LAUGHLIN. Thank you, gentlemen.

Senator YOUNG. Mr. Everett T. Winter, executive vice president, Mississippi Valley Association, has requested permission to file a statement on the New Cumberland project. That statement will be placed in the record at this point.

(The statement referred to follows:)

STATEMENT OF EVERETT T. WINTER, EXECUTIVE VICE PRESIDENT, MISSISSIPPI VALLEY ASSOCIATION IN RE NEW CUMBERLAND LOCKS AND DAM, OHIO RIVER

About a thousand delegates from 34 States attending the 34th annual meeting of the Mississippi Valley Association held in St. Louis last February unanimously passed a resolution which read in part as follows:

"We urge the Congress to appropriate adequate funds to begin construction immediately on the New Cumberland, Fernbank, and Greenup locks and dams. These structures are needed to serve navigation on this vital part of our national defense transportation system."

The Mississippi Valley Association is composed of people from all industries, from the farms and from most of the professions in America. A high percent of its members are shippers and receivers of freight.

Lock No. 7 is in an extremely bad condition and is deteriorating badly along the entire length of one wall.

Failure of this lock could stop the movement of 12 million tons of steel, coal, petroleum products, and other essential commodities for many months.

In times of peace this could be disastrous to our economy and in times of war it could be tragic.

As we see the situation, Congress is faced with two alternatives.

The first is to repair the existing facilities. This we are told would cost about $17 million. On completion of the repairs we would have a patched-up job that would perpetuate obsolete facilities.

The second alternative, and the one we sincerely recommend to this committee, is to construct a new dam and 2 modern locks on the Ohio River at New Cumberland, W. Va., to replace 3 locks and dams built in 1911 and 1914 between Midland City, Pa., and New Cumberland. The total cost of these new structures is estimated at $43 million. This is the proposed plan of the Corps of Army Engineers.

While we have referred to this project as one calling for new structures, this project, in our opinion, should not be classed as a new project. The present

locks have been in existence for some 40 years and to replace them to prevent a disastrous breakdown is in reality a question of maintenance rather than what is commonly called a new start in river-and-harbor and flood-control projects.

We recommend appropriations for a relatively small amount for the start of construction in the appropriation bill for fiscal 1954 with a target date for completion by 1958 or 1959.

The proposed improvements will serve many basic industries of our country. Should the present facilities fail there is no other form of transportation or combination of forms of transportation that are equipped to take over. All of the highway and rail facilities combined cannot take over in case of an emergency. The Ohio River carries 50 million tons of freight annually.

In case of war the thousands of freight cars that would be required in this area just could not be spared from other sections of the country.

We have checked with the Corps of Army Engineers and have learned from them that all perliminary and planning work has been completed for the building of the New Cumberland locks and dam, and should the Congress appropriate money for a start there would be no delay in actual construction.

For the good of our peacetime economy and as an absolute necessity in case of war, we sincerely ask that this construction be started at the earliest possible date.

FURTHER DISCUSSION OF HILDEBRAND LOCK AND DAM

Senator NEELY. Mr. Chairman, may we now proceed to the consideration of the appropriation for the Hildebrand lock and dam?

Senator YOUNG. Yes.

Senator NEELY. Please let me present Dr. Paul Price, the renowned State geologist of West Virginia.

Senator KILGORE. I wonder if we could get the map up so that the chairman can see it? We are more interested in the chairman's seeing the map than anybody else.

Before Dr. Price starts, may I say for the benefit of the record that Dr. Paul Price, our State geologist, who heads the geological department at the State university, is thoroughly conversant with the navigation system of West Virginia as well as the geology involved.

Senator YOUNG. We are very happy to have you here, sir.

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY

STATEMENT OF DR. PAUL H. PRICE, DIRECTOR

PREPARED STATEMENT

Mr. PRICE. Mr. Chairman, I have a prepared statement which I would like to submit for the record. I have also a map, which is a small map, and an enlargement of which is here, which I would like to use.

Senator YOUNG. The statement may be made a part of the record.

(The statement referred to follows:)

Other than a few years' time out for additional schooling and Army service, I have spent my entire professional career (31 years) with the West Virginia State Geological and Economic Survey, with headquarters at West Virginia University, on the banks of the Monongahela River at Morgantown, W. Va. This should qualify me to speak with some authority on the mineral resources of the watershed of the area and the needs for their more efficient development and utilization.

As State geologist, I have appeared five times previously to ask for improved navigation facilities for the upper Monongahela River.

The first occasion was on December 11, 1947, at the public hearing for that purpose held at Morgantown, W. Va. The second was here in Washington before the Senate Subcommittee on Public Works on March 14, 1948. The third and fourth were here before the United States Senate Subcommittee on Army

Civil Functions. The fifth was here before the House Appropriations Subcommittee this month.

At each of these meetings, among other things, I said "I favor and strongly recommend improving the existing waterway transportation facilities of the upper Monongahela River, because it will greatly aid the further development of the area's vast natural resources, and should, therefore, be looked upon as an investment rather than an expenditure."

At each appearance I submitted a prepared written statement, with map, outlining the mineral resources which would be affected by such improvements.

The full development of these resources will bring about not only new industries for their recovery but numerous allied and subsidiary industries as byproducts, which in turn makes for more real wealth, employment, better living conditions, and new sources of wealth.

A revised copy of the original statement is again submitted, but I should like to amplify a few of the major points.

1. The area abounds in fuels, especially coal of metallurgical grade. There yet remains at the beginning of this year, within 10 miles of the river in the 2 counties of Monongalia and Marion, some 3 billion tons of coal in seams 3 feet in thickness and over. At the present rate of production these coals will last over 100 years.

2. Other important bulk resources requiring low-cost transportation are limestone, dimension stone, pulpstone, glass-sand, and clays.

Our present national-defense program requires great quantities of steel. The manufacture of steel requires a low-sulfur metallurgical coal. To a large extent our steel industry is located in the Pittsburgh, Weirton, and Wheeling districts served by the Monongahela and Ohio Rivers and designed to use water transportation.

The reserve of low-sulfur metallurgical coal which formerly furnished the chief supply for these mills is rapidly approaching exhaustion. It is therefore evident that these steel companies must obtain their coals from other fields at greater distances. Such reserves are available on the upper reaches of the Monongahela River. It appears, therefore, that the principal and logical sources of metallurgical coal for the Pittsburgh-Weirton and Wheeling districts will be the low-sulfur Upper Freeport coal of Monongalia and Preston Counties and the remaining low-sulfur reserves in the Pittsburgh coal seam adjacent to the Monongahela River.

As an integral part of our defense planning, great emphasis is being given by the Department of the Interior and other Government agencies to synthetic liquid fuels. The United States Bureau of Mines station on the university campus at Morgantown is carrying on continuous research on the gasification of coals, an important phase of this program. Great progress has already been made.

In preliminary investigations for a liquid-synthesis-fuel plant, a logical site was shown to be on the upper Monongahela. The area abounds in the necessary raw materials of coal and water.

In view of these facts, it appears obvious that this request for improved navigation facilities logically fits into our defense program.

A detailed description of the more important mineral resources, together with a map showing the location of these resources in relation to that section of the Monongahela River recommended for waterway improvement, follows:

NATURAL RESOURCES OF MONONGALIA AND MARION COUNTIES, W. VA.

The following data have been compiled from West Virginia Geological Survey Reports [1] together with the writer's own knowledge of the area. These included data are purposely made brief. For further detailed information the reader is referred to the above-noted publication.

Coal.—At the present time coal is by far the most important natural resource in these two counties. Much of the coal is of metallurgical grade. The approximate location and original quantities available can best be shown by means of tables and outline figures. With the exception of the Washington, which has been computed to have an average thickness of only 2 feet, all the coals included in this report have an average of 3 feet or more. All figures on coal tonnage available represent the original amounts. It is the writer's belief that long before the thicker seams are exhausted better mining methods will permit the mining of more coal from the present seams as well as thinner seams, equal to what has already been taken from the area.

[1] Monongalia-Marion-Taylor Counties, detailed geological report with topographic and geologic maps—scale 1–62 : 5000.

The amount of coal, by counties, districts, and seams, follows:

Available coals in Monongalia and Marion Counties

WASHINGTON COAL

Counties by districts	Square miles	Acres	Cubic feet of coal	Short tons of coal
Monongalia:				
Battelle	56.40	36,096	3,144,683,520	125,787,341
Clay	57.04	36,506	3,180,402,720	127,216,109
Cass	7.65	4,896	426,539,520	17,061,581
Grant	6.70	4,288	373,568,560	14,942,742
Total	127.79	81,786	7,125,194,320	285,007,773
Marion:				
Mannington	90.79	58,106	5,062,194,720	202,487,789
Pawpaw	15.65	10,016	872,593,920	34,903,757
Lincoln	24.01	15,366	1,338,685,920	53,547,437
Fairmont	4.18	2,675	231,046,000	9,241,841
Total	134.63	86,163	7,504,520,560	300,180,824
Total for area	262.42	167,949	14,629,714,880	585,188,597

WAYNESBURG COAL

Monongalia:				
Battelle	56.40	36,096	5,403,196,160	216,127,846
Clay	63.43	40,595	6,199,113,700	247,964,548
Cass	16.69	10,682	1,628,576,720	65,143,069
Grant	17.69	11,322	1,726,152,120	69,046,085
Total	154.21	98,695	14,957,038,700	598,281,548
Marion:				
Mannington	98.30	62,912	9,591,562,520	383,662,501
Pawpaw	29.60	18,944	2,888,202,240	115,528,090
Lincoln	42.44	27,162	4,141,118,520	165,644,741
Fairmont	9.35	5,984	912,320,640	36,492,826
Grant	.52	333	50,769,180	2,030,767
Total	180.21	155,335	17,583,973,100	703,358,925
Total for area	334.42	214,030	32,541,011,800	1,301,640,473

SEWICKLEY COAL

Monongalia:				
Battelle	56.40	36,096	7,075,537,920	283,021,517
Clay	63.49	40,634	7,965,076,680	318,631,067
Cass	28.04	17,946	3,517,774,920	140,710,997
Grant	32.23	20,627	4,043,304,540	161,732,182
Total	180.16	115,303	22,601,694,060	904,095,763
Marion:				
Mannington	100.09	64,058	12,556,649,160	502,265,966
Pawpaw	38.49	24,634	4,828,756,680	193,150,267
Lincoln	56.02	35,853	7,081,905,060	283,276,202
Fairmont	19.29	12,346	2,420,062,920	96,802,517
Total	213.89	136,891	26,887,373,820	1,075,494,952
Total for area	394.05	252,194	49,489,067,880	1,979,590,715

REDSTONE COAL

Monongalia	11.27	7,212.8	125,675,828	5,027,032

Available coals in Monongalia and Marion Counties—Continued

PITTSBURGH COAL

Counties by districts	Square miles	Acres	Cubic feet of coal	Short tons of coal
Monongalia:				
Battelle	56.40	36,096	10,936,392,320	437,455,693
Clay	63.49	40,634	12,389,319,280	495,572,771
Cass	29.66	18,982	5,787,991,440	231,519,658
Grant	34.45	22,048	6,722,876,160	268,915,046
Union	8.22	5,261	1,604,184,120	64,167,365
Morgan	1.21	774	236,008,080	9,440,323
Clinton	.01	6	1,829,520	73,181
Total	193.44	123,801	37,678,600,920	1,507,144,037
Marion:				
Mannington	100.09	64,058	19,532,565,360	781,302,614
Pawpaw	39.01	24,966	7,682,632,720	307,305,309
Lincoln	56.42	36,109	11,010,356,280	440,414,251
Fairmont	19.81	12,678	3,865,775,760	154,631,030
Grant	13.68	8,755	2,669,574,600	106,782,984
Winfield	3.29	2,106	642,161,520	25,686,461
Union	1.02	653	199,182,760	7,967,310
Total	233.32	149,325	45,602,249,000	1,824,089,959
Total for area	426.76	273,126	83,280,849,920	3,331,233,996

UPPER FREEPORT COAL

Monongalia:				
Grant	1.17	748.8	97,853,184	3,914,127
Union	14.75	9,440	1,233,619,200	49,344,768
Morgan	12.25	7,840	1,024,531,200	40,981,248
Clinton	25.25	16,160	2,111,788,800	84,471,552
Total	53.42	34,188.8	4,467,792,384	178,711,695
Marion:				
Winfield	17.02	10,892.8	1,423,471,104	56,938,844
Union	.99	633.6	82,798,848	
Total	18.01	11,526.4	1,506,269,952	56,938,844
Total for area	71.43	45,715.2	5,974,062,336	235,650,539

LOWER KITTANNING COAL

Monongalia	24.01	15,366	2,677,371,040	107,094,874
Marion	66.40	42,496	7,408,503,040	296,340,122
Total for area	90.41	57,862	10,085,874,880	403,434,996
Grand total Monongalia and Marion	1,590.76	1,141,890	196,126,257,524	7,841,766,348

Rock salt.—A new resource of great potential value is now known to underlie this valley, i. e., rock salt. Deep wells indicate beds of rock salt some one hundred feet in thickness at approximately 8,200 feet below the river. Since major chemical companies are now recovering successfully salt from this same salt bed at depths of 7,000 feet along the Ohio in northern West Virginia, it is only a matter of time until similar development is expected here. Each of the chemical corporations now in operation in northern West Virginia involve the expenditure of several million dollars of new taxable wealth.

Clay and shale.—The Monongalia and Marion area is well supplied with valuable clay and shale deposits, and at numerous geological horizons, but at the present time only a small portion of those are utilized. The clay industry will provide employment for a large number of people in this district as well as considerable income to the operators of this area. When the important undeveloped deposits become better known and considered in connection with better transportation facilities, the industry is expected to greatly increase.

On the Monongahela River, between Morgantown and the Pennsylvania line and along Dunkard Creek, there are large deposits of river clay that are suitable for brick manufacture. These deposits were formerly worked successfully at Morgantown.

There is an abundance of excellent shale for brickmaking in every district of the two counties. The Washington fire-clay shale, which occurs just below the Washington coal, will provide material for brick wherever found. These shales of the Conemaugh series, bisecting the area from north to south, are good for both building and paving brick. The Mauch Chunk red shale, some 300 feet thick at its outcrop along Cheat River and Deckers Creek in Monongalia County, offers an unlimited amount of material suitable for brick.

Refractory clay.—East of the Monongahela River, fire clays are found in each of the two counties. Because of their quality and quantity these refractory clays will be in much greater demand in the very near future. Fire brick is now manufactured at Hammond, Marion County.

AVAILABLE LIMESTONE

Limestone suitable for road construction and agricultural purposes is found in the Monongahela, Conemaugh, Allegheny, and Greenbrier series in each of the two counties. Limestone suitable for cement manufacture is confined to three localities in eastern Monongalia County. At Greer, Monongalia County, a large limestone plant has been in active operation for many years.

RIVER AND CREEK GRAVEL

There is an abundant supply of gravel in nearly all the larger stream beds that is available for road material.

AVAILABLE SAND

The stream terrace deposits of the Monongahela Valley, already extensively developed, offer a large amount of sand for building purposes. This sand is unconsolidated and convenient to transportation.

PULPSTONE AND BUILDING STONES

Monongalia County is probably the largest individual producer of natural pulpstone abrasive in the world. In former times and even yet this is a valuable resource to this area. These stones are for the most part shipped to the various pulp mills of the United States and Canada. Occasional orders have been shipped to Japan. These pulpstone quarries are all located along the Monongahela River between Fairmont and Morgantown.

Along with pulpstone the entire area is blessed with an unlimited supply of excellent sandstones suitable for all kinds of masonry and construction work. The use for which these stones have been put has been confined largely to local building, i. e., Methodist Episcopal Church, university president's home, and numerous private homes in Morgantown, wells, bridge piers, and abutments, and curbing both locally and at Pittsburgh, Pa. The only reason these natural building stones have not had a greater development is because of expensive quarrying operations and freight rates.

Monongahela River transportation and new techniques in quarrying will undoubtedly place the natural building stone of this area in a strong competitive position among the building stones of the country.

A list of sandstone horizons that have been or are now being operated in this area follows:

Quarry	Sandstone horizon	Location
J. D. Charlton	Mannington	Mannington.
A. R. Wilcox	Waynesburg	Downs.
Georges Creek C. & O	do	Underwood.
C. B. Conoway	do	Barracksville.
Georges Creek C. & O	Gilboy	Underwood.
J. F. Watson	Sewickley (Arnoldsburg)	Fairmont.
George Lilley	Pittsburgh	Do.
J. F. Watson	Upper Pittsburgh	Do.
W. B. Ice & Co	do	Do.
William Cox	(Lower) Connellsville	Morgantown.
Leverly and Casto	Morgantown	Do.
William Gaston	do	Do.
W. A. Willhide	Buffalo	Grafton.
Charles Stozenfels	do	Do.
John M. Keane	do	Do.
Christien	do	Morgantown.
L. V. Keck	do	Do.
Sims & Co	Mahoning (Upper Freeport)	Yates.
D. N. Going	Homewood	Dellslow.
Deckers Creek Sand Co	Homewood (Upper Connequessing)	Sturgisson.

GLASS SAND

Sandstone suitable for glass sand is found in the Pottsville series in both counties. In the valley of Deckers Creek, Monongalia County, these horizons are now being operated for glass sand as well as other purposes for which sand is used.

In the Cheat River Canyon the Pottsville series is exposed throughout a large areal extent, but lack of transportation prevents present development. Along the Tygart River in Marion County and bordering Taylor County, the Homewood and Connoquenessing sandstones outcrop at Valley Falls, where quarries could easily be developed.

IRON ORE

Monongalia County was the scene of an extensive ironmaking industry from 1800 to 1870. Five furnaces were operated along Cheat River near Ice's Ferry, 1 at Clinton Furnace, on Booths Creek, and 1 at Rock Forge on Deckers Creek. In Marion County there was a furnace on Piney Run, Winfield district.

The iron ore available in the territory of this report is largely from carbonate and is not of sufficient quality and quantity to compete with the Lake Superior ores.

NATURAL GAS AND PETROLEUM

Monongalia and Marion Counties have been important producers of Penn-Grade Petroleum in past years but present production is very small. In these old fields, however, there remains as much or even more oil than was produced by primary methods. Secondary recovery methods which are now being generally adopted will cause these counties to continue to produce oil for many years.

New discoveries of large volume natural gas fields in the adjoining counties together with improved storage and pipeline facilities assures the area of abundant supply of this important fuel.

Respectfully submitted.

PAUL H. PRICE,

Director and State Geologist, West Virginia Geological and Economic Survey.

NATURAL RESOURCES OF AREA

Mr. PRICE. I have spent my entire professional career upon the banks of the Monongahela and on the campus of West Virginia University, the point with which we are now especially interested.

It is quite obvious that at the present time our country, especially our Congress, is interested in economy. If I were here simply to ask for an appropriation for the expenditure of funds on which we

could see no immediate and important returns and which was not an investment, I would not be here. The area in which we are interested is an area of vast natural resources and resources largely of the bulk type, which for the most part requires cheaper transportation.

In the heart of the upper Monongahela Valley we have great coal mining and coal reserves. There are within a radius of 10 miles on either side of the river 3 billion tons of coal of 36 inches in thickness or over. Furthermore, this is an area of metallurgical coal, large portions of it are metallurgical coal or the types of coal which are so needed in the steel industry.

The metallurgical coals, the large reserve of coal in the Pittsburgh area, is rapidly reaching exhaustion so that the steel companies must look farther and farther up the river for this type of coal. Perhaps you know the general area well, but for the point of view of orientation we have Morgantown, Fairmount, which is 70 miles south of Pittsburgh, the great coal-steel area, and we go along to Wheeling so that it is in the area of the large steel manufacturing.

The coals then alone at the present rate of production which is approximately 12 million tons a year for Monongalia County and Marion County, the 2 counties in which we are especially interested, are good for 100 years. So that I think it cannot be emphasized too strongly that we must look to this area for important coal reserves for those steel centers.

Senator KILGORE. Doctor, could I interrupt at that point? Is that not one of the largest reserves of metallurgical coal left now in the East?

Mr. PRICE. That is true.

Senator KILGORE. All right, go right ahead.

ROCK SALT MINING

Mr. PRICE. One other important resource that has not yet come into production but which we now know is present and which has been so important in the northern West Virginia Panhandle, namely, rock salt. Two major chemical industries have developed on the Ohio based on rock salt, and there are two additional ones. Each of these leads to the expenditure of some $50 million for each plant.

Now that we know that rock salt is beneath this area, be look for similar development there. We have shown here the numerous mines, the numerous sandstone quarries, the limestone areas, clays, sand and gravel, and so forth. Then you have the building stone or the bulk materials. Because of these important basic raw materials we know that they will lead to the development of new industries, new wealth for which we will provide labor and taxable labor.

NATURAL GAS

One further important resource which applies to that area is the presence of large quantities of natural gas. There is a large natural gas field here, and I have shown on this map the high pressure gas lines which would be available for new industry, not that it would be used by locks and dams, but it fits in with my general contention that this is a type of improvement which represents progress, which will bring about the development of new industries.

Now I know our time is short. If there are any questions I would be glad to answer them.

Senator NEELY. Of what importance to the transportation of coal on the Monongahela River is the completion of this project?

Mr. PRICE. No. 1.

Senator NEELY. What obsolete dams above Hildebrand would be discontinued, and the heavy expense of maintaining them be eliminated if this project under consideration were completed?

Mr. PRICE. The exact number will have to be stated by the engineers, I believe it is 12 and 13.

Senator NEELY. Let me ask the engineer to state the annual expense of maintaining locks Nos. 12 and 13?

Colonel MILNE. Senator, I do not have the annual maintenance, but I can furnish it for the record.

Senator YOUNG. That will be done.

(The information referred to follows:)

Monongahela River Locks and Dams Nos. 12 and 13

	Estimated costs, fiscal year 1953	Actual costs		
		1952	1951	1950
Lock No. 12:				
Operations	$40,000	$42,462	$39,191	$35,734
Ordinary maintenance and repairs	950	69	1,692	−451
Improvement and reconstruction		13,243	15,780	
Total	40,950	55,774	56,663	35,283
Lock No. 13:				
Operations	40,000	43,331	38,858	36,492
Ordinary maintenance and repairs	600	679	−192	197
Improvement and reconstruction		13,933	17,217	
Total	40,600	57,943	55,883	36,689

EXPANSION OF STEEL INDUSTRY

Senator KILGORE. One other question. Is it not a fact that these deposits of metallurgical coal in West Virginia and Pennsylvania are largely responsible for the tremendous expansion of the steel industry in what we call the Pittsburgh district, which includes Pittsburgh, and extends to Steubenville and Wheeling? Is that not one of the major causes of the expansion?

Mr. PRICE. I think there is no question about that, plus water transportation.

Senator KILGORE. And is it not a fact also that we have gone ahead and developed the lower Monongahela practically up to Morgantown? We can get good transportation up to Morgantown, but below, north of the Pennsylvania line, is where you have exhaustion of coal; in fact, from Morgantown to Pittsburgh is where the coal readily accessible to water transportation is exhausted?

Mr. PRICE. That is true.

Senator KILGORE. So that they are going up and half loading barges on the Monongahela that the Hildebrand is supposed to serve in order to get that coal. Otherwise their cost of coal would be greater?

Mr. PRICE. That is true, but that fact was to be brought out by another witness.

Senator KILGORE. I wanted to ask you as a geologist to bring out that fact that that coal is a special kind of coal and is needed badly.

Mr. PRICE. That is true.

Senator YOUNG. Thank you very much.

Mr. PRICE. Thank you, gentlemen.

Senator NEELY. Will Mr. David Mathews please proceed?

PITTSBURGH COAL EXCHANGE

STATEMENT OF DAVID MATHEWS, SECRETARY-TREASURER

GENERAL STATEMENT

Mr. MATHEWS. My name is David Mathews, Jr., representing the Pittsburgh Coal Exchange.

As Dr. Price has so ably pointed out, the area between Morgantown and Fairmont, W. Va., is the most easily accessible place that the steel industry can obtain good metallurgical coal. The locks and dams to be replaced, 12 and 13, were built in the period 1902 and 1903. They were originally hand locked and they have been patched up and machinery has been made available for locking, but they are so small that we can only get two barges in a lock at a time.

A standard Monongahela tow consists of 6 barges, and if we take a tow of 6 barges up there, we can only put 2 barges in a lock at one time and we can only half load them, so it takes about 3 hours to make 1 locking through 1 of these locks. If a lock such as the Morgantown Dam were constructed, then we could use a standard six-barge tow loaded to capacity and locking would be a matter of minutes instead of hours.

TRAFFIC PROBLEMS

We face another problem in upstream traffic. All of the traffic in that area is not coal coming downstream. You have petroleum products going upstream, for example. At Morgantown the gasoline and oil barges have to be unloaded so that they can go through to Fairmont. In fact, the locks are so small that one of the larger modern barges containing gasoline would not even fit into the locks. You cannot get one barge into the locks.

SURVEYS

Wet first started a survey back in 1939 and asked the Army engineers to make a survey or ask the Congress to permit them to make a survey knowing that we were going to have to go into this area. To illustrate the fact that we are using present facilities, regardless of this poor economy, let us put it, back in 1939 lock 12 tonnage was 45,000 tons. Last year one of our companies in our coal exchange moved 1,040,000 tons through that lock. That is more than 2,000 percent increase in tonnage, 1,000 percent increase in locking. We have to obtain coal somewhere. This is the most easily accessible place, and the present locks and dams just are physically unable to take care of the needs of Pittsburgh.

May I also include a statement from the Propeller Club with my own statement?

Senator YOUNG. Yes, sir.
(The statement referred to follows:)

STATEMENT OF DAVID MATHEWS, JR., REGARDING HILDEBRAND DAM, MONONGAHELA RIVER

My name is David Mathews, Jr., secretary treasurer, the Pittsburgh Coal Exchange, with headquarters in Pittsburgh, Pa. The exchange was organized in 1870 and has, since that time, represented the leading steel companies, coal companies, and barge lines whose names are listed on the attached letterhead. Our member companies ship some 40 million tons by river annually in the Pittsburgh area.

We are vitally interested in the modernization of the upper valley of the Monongahela River above Morgantown, W. Va. by means of new locks and dams at Hildebrand and Opekiska, which will give a project depth of 9 feet, thus accommodating a standard Monongahela River tow of boat and 6 barges capable of hauling up to 6,000 tons of coal. We have an acute demand for metallurgical coal in the Pittsburgh area because the supply of this type coal in the captive mines of the steel companies has been largely exhausted. Consequently we have to form a new operation which involves going farther and farther upstream for an adequate supply. Our surveys reveal that there are billions of tons of the finest quality of metallurgical coal in the Morgantown-Fairmont area which is close enough to the river to be shipped by barge to the consumer, and which will supply peak production for more than 100 years. Evidence of the sharp increase in use of coal from this area is revealed in the following table of tonnages moving through the locks in the 10-year period from 1939 to 1950:

Lock No.	1939	1950
	Tons	*Tons*
15	36,000	165,000
14	36,000	438,000
13	44,000	428,000
12	45,000	798,000
11	52,000	760,000
10	51,000	686,000
8	580,000	1,493,000

During the year 1952, one of our companies alone passed 1,044,000 tons through lock 12 which would be replaced by Hildebrand Dam. Obviously this is a very valuable waterway. Out-moded and worn out locks and dams cannot hope to cope with present requirements to say nothing of the assured increases in tonnage. Investigation of consumer demand in the Pittsburgh district shows that there is a need for 30 million tons a year of coal from the project area. The limitations of the channel and the small size of the locks make it impossible to handle this much tonnage even if the locks were not antiquated and worn out. Coal barges can be only half loaded and petroleum barges must be partially unloaded to go above Morgantown. In fact the larger type of oil barge will not even fit the locks.

The assured future tonnage based upon consumer demand will increase traffic in the upper valley to a degree comparable to the lower Monongahela River, which is the most economically justifiable waterway in the world, the locks averaging as much as 22 hours out of 24 hours in operation and the average annual tonnage in excess of 30 millions.

The Congress of the United States has been most wise in building the new lock and dam at Morgantown. It has been a wonderful step in the right direction. New mines have been opened and new docks built as a result, but full economic utilization of this fine new structure cannot be realized as long as the river above is closely restricted by channel limitations and small, worn-out locks and dams. The seriousness of their condition can be realized by the recent failure at lock 15, when the wall moved and the sill raised and broke, stopping traffic entirely.

The river must feed the demands of the gigantic steel producing area of the lower valley. It can be done only by opening the coal fields above Morgantown to a modern waterway capable of handling the huge tonnages necessary to keep the mills running. Moreover, development of this area will bring new businesses

and services, new and greater employment, added revenue to all types of transportation, a better balanced economy and promote the general welfare of the entire valley and surrounding area.

For the above reasons, we urge the immediate construction of the proposed Hildebrand Dam on the Monongahela River.

THE PROPELLER CLUB OF THE UNITED STATES,
Port of Pittsburgh, Pa., May 18, 1953.

Hon. WILLIAM KNOWLAND,
United States Senator, Chairman, Subcommittee on Civil Functions, Committee on Appropriations, United States Senate,
Washington, D. C.

DEAR SIR: The Propeller Club of the United States, Port of Pittsburgh, is composed of members representing industries utilizing the rivers and a large number of businesses vitally interested in river transportation on the Mississippi River system in general, and the Monongahela, Allegheny, and Ohio Rivers in particular. I, as chairman of the rivers and harbors committee of this organization, have been directed to write you and other members of your subcommittee to inform you of the necessity this organization feels for proceeding immediately with the modernization of the Upper Monongahela River.

The original slackwater system was provided on this stretch of river, that is from Morgantown, W. Va., upstream, by the construction of locks Nos. 10 and 15 inclusive during the period 1897 to 1903. Locks Nos. 10 and 11 of this group have been replaced by the New Morgantown lock and dam. The remaining old facilities, that is locks 12, 13, 14, and 15 are from 45 to 50 years old and wholly inadequate for modern river transportation. The lock chambers are only 56 feet wide by 182 feet long and craft drawing or loaded to more than 6 foot draft cannot pass through them. Since the project channel on all improved sections of rivers of the Mississippi River system is 9 feet, shippers from the Upper Monongahela River area are not only prevented from securing the full advantage of cheaper water transportation locally but are being denied access for economical shipments to all points on the Mississippi River system.

The next step in modernization of the Upper Monongahela is the construction of the Hildebrand lock and dam to replace the present locks Nos. 12 and 13. An indication of the immediate necessity of beginning construction of the Hildebrand lock and dam, is the progressive increase in tonnage locked through No. 12. In 1939 the tonnage locked through Nos. 12 was 45,000 tons, by 1950 it had increased to 798,000 tons. Although official figures are not available yet for 1952, we know the tonnage was well over 1,000,000 tons and a survey for 1953 indicates it will increase to 1,500,000 tons.

Though coal, by far makes up the greatest volume of tonnage moved through this lock, there exists a large potential tonnage of oil, gasoline, sand, gravel, and other bulk commodities that would be transported by river, if channel depth and lock facilities were provided to accommodate modern river boats and barges loaded to their full capacity. The full economy possible in river transportation can not be secured in shipping in partly loaded barges which present lack of adequate lock and channel facilities, compels.

Present industrial developments and the great potential for further development of this area certainly leaves no question in the minds of those familiar with river transportation in the Pittsburgh district, that this project is fully justified economically. The economic justification of the lower Monongahela River is a proven fact, and there is every reason to expect that the authorized project for modernization of the Upper Monongahela will also prove sound economically.

The Propeller Club, Port of Pittsburgh, has given serious study and consideration of this project and for the reasons given above respectfully urges that Congress appropriate the necessary funds to begin immediately the construction of Hildebrand lock and dam on the Monongahela River.

Sincerely yours,

W. J. KELLY,
Chairman, Rivers and Harbors Committee.

Senator NEELY. This project is situated in the Second Congressional District of West Virginia, which is ably represented by Hon. Harley O. Staggers, who is our next witness.

STATEMENT OF HON. HARLEY O. STAGGERS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

HILDEBRAND LOCK AND DAM

Representative STAGGERS. Mr. Chairman and members of the committee, I would like to make a brief statement and insert in the record additional remarks.

Senator YOUNG. That may be done.

(The statement referred to follows:)

STATEMENT OF REPRESENTATIVE STAGGERS RE HILDEBRAND LOCK AND DAM PROJECT

Mr. Chairman and members of the committee, again I want to add my plea for sufficient appropriations to improve the navigation facilities on the Monongahela River in Monongalia County, W. Va., which is a part of my congressional district.

Construction of Hildebrand lock and dam was authorized by the River and Harbor Act approved May 17, 1950. The project provides for replacement of locks and dams Nos. 12 and 13 by the Hildebrand lock and dam, a single lock 84 feet wide by 600 feet long, and a movable crest dam; and for channel dredging in the pool of the Hildebrand lock and dam to provide greater channel depths and wider navigable channel.

The project with its increased channel dimensions along with the increased lock size will permit full loading of standard coal barges and the efficient movement of Monongahela River standard six-barge tows without breaking and reassembling the tows during lockage, resulting in savings in transportation costs and operating time. It is felt that construction of this project is desirable and economical since it would provide a modern water-transportation facility for the important Fairmont coal-producing district similar to that now existing on the lower river.

The project will facilitate an increased movement of the large reserve of low-sulfur coal now being developed in the area to serve the important downriver industrial areas. Hildebrand will replace locks 12 and 13 whose inadequacy and obsolescence have been accentuated by the increased lockages presently being experienced in this reach of the river.

The merits of this project cannot be questioned. Its completion is long overdue and it should be concluded without further delay.

The Monongahela River flows through one of the most extensive and valuable coalfields in the world. The transportation of this coal is seriously handicapped by the lack of adequate and modern transportation facilities on this river. As you all know, coal is one of our Nation's most important defense resources. It is needless for me to repeat its many uses in our defense efforts. The completion of this highly important waterway will open the channel to a greater reserve of this much-needed metallurgical coal.

Not only is this waterway needed for the transportation of coal but for the development of this rich area's vast natural resources. It is essential to the defense program of the Nation to allow this mineral to flow to the steel mills as speedily as possible, which it cannot do now because we do not have the railroad facilities to carry it.

There are 25 mines above these locks which would be affected by the dam and lock and the potential of these mines, running something over 15 million tons yearly of coal, could be gotten out if this project is completed.

It is in the interest of the public welfare that the project be completed. The amount needed to finish this work will be comparatively small in comparison with what has already been spent. This development would mean more employment, better living conditions, and more coal flowing to industry, which would result in increased tax collection for the Government.

I believe it is an investment in America's future, not an outlay or expenditure of money. It is our responsibility to look into the future and not just at the present outlay. With adequate transportation facilities provided there are thousands of acres of coal land that could be developed in this section.

We have been shortsighted on many things, especially on our ore products. If the world emergency continues we will be forced to turn to hydrogenation of coal and synthetic liquid fuels, and 98 percent of our fuel reserve is in coal.

Representative STAGGERS. This, Senator Neely has told you, lays in my district, and I am very much in favor of it; I think it is essential not only to our people there in the district but to the Nation.

As Dr. Price has told you, the Monongahela flows through one of the most, well, best coalfields in the world. It needs these facilities in order to expand. There are 25 mines which lie above the proposed Hildebrand lock and dam. We have extensive unemployment in the district. I understand the administration is proposing public works or going to do so later in some of these areas. If this construction is carried on now it will probably help to alleviate the situation and would open up these other mines and see that the coal is carried into the steel mills.

To me, as Senator Neely said about another project, it is an investment in America's future, and it is not just an expenditure and outlay now. I strongly urge the committee to include it in the appropriation.

Senator NEELY. Congressman, will you state the amount of the appropriation desired.

AMOUNT REQUESTED

Representative STAGGERS. As I understand the amount that is requested in this appropriation would be $2,750,000.

Am I right on that?

Colonel MILNE. That will be a reasonable amount of money to start with.

Representative STAGGERS. That is what I understood.

Senator YOUNG. Thank you very much, Congressman, and your prepared statement will be placed in the record.

Representative STAGGERS. Thank you, gentlemen.

Senator NEELY. Next we have Mr. W. H. Griffith, secretary and business representative of the Masters, Mates and Pilots of America, Local No. 25.

NATIONAL ORGANIZATION, MASTERS, MATES, AND PILOTS OF AMERICA, LOCAL NO. 25, PITTSBURGH, PA.

STATEMENT OF W. H. GRIFFITH, SECRETARY AND BUSINESS REPRESENTATIVE

HILDEBRAND LOCK

Mr. GRIFFITH. I am W. H. Griffith, secretary and business representative of the National Organization of Masters, Mates and Pilots of America with offices in Pittsburgh, Pa. I represent the men who annually handle some 100 million tons of material on inland waterways. We are very much concerned with the construction of this new Hildebrand lock for the reason that the locks in that particular area are so small that it is almost impossible to bring any amount of material through there with any degree of safety.

Senator KILGORE. Let me interrupt there if I may. Is it not a fact that they are not only small but very old and in poor condition?

Mr. GRIFFITH. That is correct.

Senator KILGORE. In fact, I think the last one was built about 1903?

Mr. GRIFFITH. In 1903, and the first lock that came through there was December 1903.

We are experiencing in Pittsburgh for the first time in a good many years an oversupply of licensed masters and pilots who have spent their lifetime on the river. In fact, that is all they know, sir, is the river. We are not any different from any other group; we beef and raise a lot of Cain about high taxes, but we would rather pay high taxes than be unemployed.

I have a statement which I would like to submit with your permission in support of the construction of the Hildebrand lock and dam.

The statement will be inserted in the record.

(The statement referred to follows:)

STATEMENT OF W. H. GRIFFITH ON HILDEBRAND LOCK AND DAM, MONONGAHELA RIVER

My name is W. H. Griffith, secretary and business representative of the National Organization of Masters, Mates and Pilots of America, Local No. 25, with headquarters in Pittsburgh, Pa. Our membership includes some 300 licensed deck officers on river towboats, who handle some 100 million tons of traffic on the Mississippi River and its tributaries annually.

Although we are essentially a labor organization affiliated with the American Federation of Labor, Local 25 was organized in 1892 for the purpose of aiding and abetting the orderly development of the western rivers for navigation and commerce. The members of our organization have for many years assisted other waterways organizations and the Corps of Engineers, to whom the work was entrusted, in the proper location, design, and construction of locks and dams and the maintenance of channels on the Ohio and Monongahela Rivers.

We are very much concerned with immediate construction of Hildebrand Dam to replace locks and dams Nos. 12 and 13 on the Monongahela River. These locks were built in the period from 1901 to 1903 and are worn out and literally falling apart. They are too small to accommodate a standard tow of six barges and towboat as to the locks on the lower Monongahela River. We must operate small boats of insufficient horsepower and half-loaded barges through antiquated locks that are powered with makeshift equipment. Locking time usually requires 3 hours, as compared with a matter of minutes at larger locks. The locks are dangerous to navigate, especially during high-water stages and swift currents, which occurs often in the headwaters of the river, and the possibility of damaging equipment and the locks as well is ever present.

We are being called upon more and more to take increased tonnage through these small and dangerous locks. Government statistics show an increase of 2,000 percent in tonnages and 1,000 percent in the number of lockings over a 10-year period. This tonnage is bound to increase sharply. The metallurgical coal has largely been depleted in the captive mines of the steel industry in the lower valley. Literally billions of tons of such coal lies along the Monongahela River between Morgantown and Fairmont. Our members are called upon to deliver it to the steel corporations, and even the coal companies are swiftly converting to small-sized but powerful diesel towboats for this trade. The day of the steamboat on the Monongahela River is past. We must now move millions of tons of coal from the upper river with more modern equipment. The need for coal each day in the mills is tremendous. One plant alone on the Monongahela River at Clairton, Pa., uses 35,000 tons of coal a day, and as many as 52 barges have been unloaded there in a single day. This traffic puts an enormous burden on river locks. It it impossible to handle it with 50-year-old locks that are ready to collapse.

As a result of this new trend in operations and sources of supply we are experiencing a temporary condition of an oversupply of rivermen for the first time in more than 20 years. The men involved have spent a lifetime on the river and all hold Federal licenses over the reaches of the river on which they ply their trade. They cannot be absorbed by other industry.

Construction of Hildebrand Dam will assure us full employment as fast as the companies can furnish equipment. The new boats are ready and there are plenty of barges available. The industry needs the tonnage and, in fact, must have it to operate.

We submit that Hildebrand Dam is one of the most necessary projects in the Nation. Industry, labor, and the general public must have it for their economic welfare. It would be false economy to delay construction any longer. Therefore, we urge that Congress appropriate sufficient funds to begin immediate construction of Hildebrand lock and dam.

Mr. GRIFFITH. I would like to substantiate Mr. Mathews' statement to the effect that in 1939 there were 45,000 tons; in 1940, 77,000 tons; in 1941, 50,000 tons; and in 1952, 1,054,000 tons, which came through lock 12, which would be replaced by Hildebrand Dam. That tonnage came through so-called lock 12 in partially loaded barges which would take about 3 hours per lock.

Senator YOUNG. Thank you very much.

Mr. GRIFFITH. Thank you, gentlemen.

Senator NEELY. Elmer W. Prince, the distinguished city manager of Morgantown, is our next witness.

CITY OF MORGANTOWN, W. VA.

STATEMENT OF ELMER W. PRINCE, CITY MANAGER

GENERAL STATEMENT

Mr. PRINCE. Mr. Chairman, I will not take too much time, I hope, but there is a record here which I will not go into. However, I would like to make the statement that the Monongahela Valley is in a very rugged terrain with the elevations ranging from about 800 to 1,460 feet above sea level.

Now the Monongahela River goes right through this valley and the word Monongahela is an Indian name for sliding banks. As a result the river is known as the river with sliding banks.

ANTIQUATED TRANSPORTATION

Transportation on the Monongahela is antiquated, it is a long way from being sufficient and needs complete overhauling. The road system in that area consists of roads that were constructed from about 1914 to 1922, which means that they are very, very narrow and winding nature. The State Road Commission in West Virginia has in the past 3 years awarded a contract for the relocation of one of those roads which winds along the river and the rough grading is costing about $600,000 per mile.

A bridge was necessary over the Monongahela as a part of this system, and that bridge is costing about $600,000. So it means that the State Road Commission of West Virginia is unable to meet the demands of the current public, the truckers, and the automobiles for transportation facilities.

Now the railroad on the east side of the Monongahela is the Baltimore & Ohio Railroad. It is a single-track railroad. Back in the early twenties I remember there was—well, on the west side of the river there is the Monongahela Railroad, which is owned by the Baltimore & Ohio, the New York Central, and the Monongahela Railroad, a triparty ownership.

Back in the early twenties there were 20 trains going in and out of town each day from Fairmont to Pittsburgh, and I might say that those were passenger trains. In addition to those passenger trains there were freight trains. Today there is but one train a day out of Morgantown either way from Fairmont to Pittsburgh, and that shortly will be taken off. The rest of the lines on both sides of the river are taxed as a result of freight haulage.

On the east side of the river there are seven trains each way a day. One of those trains is a Western Maryland train going from Elkins to Connellsville, bringing coal through that area. On the west side of the river from Fairmont down to 3 miles north of Morgantown there are 7 trains a day, and from that 3-mile point north of Morgantown to Brownsville, Pa., there are 14 trains a day.

Now both of these railroads are single-track roads, they are heavily taxed as I have been told by representatives of both the Baltimore & Ohio and the Monongahela Railroads. They are inadequate in sidings, and it is impossible due to the terrain for the railroads to construct double tracking or even to go further with their sidings.

The pictures here, the photographs, will indicate the rugged terrain and will also indicate the location of the railroad with reference to the river.

ABANDONMENT OF STATE HIGHWAY

Now I might say that on the western side of the Monongahela River is a State highway, and that is just above the Monongahela River. This State highway is being abandoned by the State Road Commission because it cannot hold the road in its location since that highway is continually slipping into the railroad as a result of the slope. It brings it down to one thing, river transportation.

As you have heard, the river with the new lock and dam at Morgantown gives fair access, and I believe there is an improvement below the first lock which will assist in the transportation between Morgantown and Pittsburgh. But from Morgantown to Fairmont is the weakest link in the chain, and as you know, a chain is no stronger than its weakest link. To get those products out of the northern end of the river, or out of the southern end of the river to Pittsburgh, it is going to require the additional facilities between Morgantown and Fairmont.

If there is anyone who cares to ask any questions, I shall try to answer them.

Senator YOUNG. I do not think I have any questions. I think you have made a good case.

Mr. PRINCE. I would like to have my statement made a part of the record.

Senator YOUNG. That will be done.

(The statement referred to follows:)

MORGANTOWN, W. VA., *May 20, 1953.*

COMMITTEE ON APPROPRIATIONS,
United States Senate, Washington, D. C.

GENTLEMEN: The writer has been advised that a new hearing is being held by your committee to consider the inclusion of an item in the 1953 appropriation bill for the improvement of navigation facilities of the Monongahela River between the present lock No. 10 at Morgantown, W. Va., and Fairmont, W. Va. It is the desire of the writer to express his views in behalf of the project as a result of his residence in Morgantown for the past half century, and as an

employee of the engineering department and city manager of Morgantown since 1922, except during a period of World War II when he was granted a military leave of absence.

During the early 1900's heavy and voluminous shipments of materials, supplies, and equipment for the Morgantown area from Pittsburgh were transported on the Monongahela River; these shipments included road-building supplies and equipment, as well as supplies, equipment, and materials for industries then being located in Morgantown and the surrounding area. Since that time the demands for river transportation have changed in the character of shipments but the volume has increased manifold. As a result of increased demands for river transportation, the United States Army Corps of Engineers, in the 1930's, held hearings and made numerous surveys, of the Monongahela River between Pittsburgh, Morgantown, and Fairmont, to determine the facilities required to meet the demands for river transportation.

Again, in the middle and late 1940's the Corps of Engineers recognized the need for more adequate transportation facilities along the Monongahela River, between Morgantown and Fairmont, and surveys were made and hearings held with the subsequent hearings before committees in both Houses of Congress. The result of the surveys and hearings was the improvement of water facilities between Pittsburgh, Pa., and Morgantown and the recent construction of more modern and adequate lock and dam at Morgantown, to provide for the use of larger and more numerous river transportation units.

Since the last survey by the Corps of Engineers and hearings of Congress, large coalfields of metallurgical coal, as well as industrial organizations, have begun or expanded plant operations and propose to use river transportation for shipments of supplies and materials from their locations with deliveries to Pittsburgh, Pa., Wheeling, W. Va., and other points in the East and Middle West. A very large part of the production from the coalfields and industries between Morgantown and Fairmont and the very recent development of the Preston County coalfields are for delivery to steel mills and other industries producing equipment and supplies for national defense. The United States Army, in the latter part of 1951, awarded a contract effective January 1, 1952, for a 20-year period in 5-year increments to the Mathieson Chemical Corp. for the operation of the $65 million Morgantown Ordnance Works, located on the Monongahela River, near Morgantown for the production of ammonia, methanol, and other byproducts required for military and commercial use; Mathieson Chemical Corp. is now in the process of preparing plans and specifications and in the near future will award a contract for the construction of another $15 million plant at this present location. The United States Bureau of Mines awarded a contract in 1952 for the construction of a $2,600,000 experimental station to be located about one-half mile from the Monongahela River at Morgantown and this plant is now under construction. The board of governors of West Virginia University awarded a contract in the late summer of 1952 for the construction of a $1,200,000 mechanical or heating plant, the first unit of a $20 million medical center and school to be located in Morgantown and in the fall of 1953 will award a contract for the first units of the classroom building. The Freeport Coal Co. has completed plans and is receiving bids for the construction of a large loading dock for coal and miscellaneous materials on the Monongahela River in Morgantown. The problem now facing the industrial organizations between Morgantown and Fairmont is the lack of sufficient depth of the stream to permit the use of proper river transportation units for the expeditious and economical water shipment of the supplies. The construction of another lock and dam on Monongahela River, at Hildebrand, W. Va., south of Morgantown, will provide water transportation facilities to meet the greater part of the present demands for river transportation between Morgantown and Fairmont.

From the knowledge and experience gained by the writer, during his 63 months of military service, during World War II, as an officer in the United States Army Corps of Engineers, of which 32 months was with military government in the ETO, August 1943 to April 1946, which service was in both combat and rear areas of Italy, France, Luxembourg, and Germany in charge of public works, utilities, industries, and governmental agencies, of the occupied areas to which he was assigned, the transportation by railroads and highways in these areas was completely disrupted by reason of bombing by Allied planes and demolition by retreating German armies and the countries, particularly Germany, were forced to depend upon river transportation for distribution of commercial equipment, materials, and supplies, i. e., Danube, Rhine, etc. Prior to and during World

War II, Germany and Italy operated under dictatorship governments with the result that labor unions were outlawed and there were no such things as strikes. With strikes a part of our national routine, railroad shipments in the past have suffered severely and the same may happen in the future. The transportation problems, if coordinated with water facilities, would be diminished greatly.

During a war period, strikes and sabotage of railroads and highways would definitely cripple this Nation without the aid of adequate river transportation. In the past 3 or 4 years this country has seen a dire lack of railroad cars for railroad transportation shipments while river barges for the same purposes have been plentiful. The American Automobile Association, in its magazines and news releases, has indicated that the highways of the country are saturated with automobiles and trucking equipment. State and local governments throughout the Nation have been and are now unable to meet the additional highway demands as a result of the very great increase in the number of automotive vehicles and construction costs, which added burdens are far and above the increases in revenue to the governmental agencies. During the past 2 weeks the Lehigh Construction Co., subcontracting for the Southeastern Construction Co. who are erecting the $2.6 million United States Bureau of Mines experimental station at Morgantown, attempted to find a highway routing from Lehigh, Pa., to Morgantown, for a 52-ton crane and hoist on a tractor trailer unit to be used in the erection of the steel for the structure; unable to find a highway route with adequate width, alinement and bridges between Uniontown, Pa., and Morgantown, W. Va., the equipment was dismantled and is being shipped on railroad cars and reassembled upon arrival in Morgantown.

From personal observation in this area over the past 40 years and the experience gained while serving with the United States Army Corps of Engineers in Europe, it definitely appears that the best way in which the Federal Government may spend money for national defense is to strengthen the water transportation system in heavily populated areas of the country and particularly the Monongahela Valley which will supply the much needed metallurgical coal to the nearby market of steel mills in the Pittsburgh and Weirton areas.

The construction of lock and dam No. 10 at Morgantown has also materially aided the United States Government in its flood-control program along the Monongahela, the Ohio, and Mississippi Rivers. The large Tygart Valley Dam, near Grafton, W. Va., constructed as a flood-control project, in conjunction with new dam construction along the Monongahela, Allegheny, and Ohio Rivers, could be assisted in the program by the construction of additional modern locks and dams between Morgantown and Fairmont. The United States Government, through the Army Corps of Engineers, has recently completed lock No. 10 on the Monongahela River, in Morgantown, W. Va., at a cost in excess of $8½ million, but this completed lock and dam fails to provide the facilities necessary for river transportation in the newly developed metallurgical coal and industrial areas between Morgantown and Fairmont, W. Va. By the completion of 1 more lock and dam, namely, the Hildebrand, or lock No. 11, the recent and past investments more adequately become serviceable, and the present lock No. 10 and the proposed lock No. 11 will make available for river transportation large areas of the natural resources which are indispensable in the manufacture of steel which is so vital for our national defense. In addition to acting as a flood-control measure, the Tygart Valley Dam, the present lock and dam No. 10, and the proposed lock No. 11, proposed to be located at Hildebrand, W. Va., would provide adequate water supply for water transportation facilities at all times, and the condition of extended drought, as in 1930 when the Monongahela River in Morgantown was completely dry, would be averted. The series of locks and dams, including the proposed Hildebrand lock and dam, would serve a dual purpose, namely flood control and transportation facilities in both storm and dry periods. By letter dated January 2, 1952, this office requested the United States Army Corps of Engineers to recognize the necessity and urgency of an adequate water supply for the more than 35,000 persons of Morgantown and contiguous areas who are dependent upon the Monongahela River for the primary source of water supply for domestic, commercial, industrial, and fire uses; this same condition exists for all other towns along the Monongahela River from Morgantown to and including a part of Pittsburgh, Pa., which area is rapidly expanding by population and industrial growth.

As additional and supporting data to the previous statements the following information is submitted:

(*a*) Monongahela is an Indian word meaning "sliding banks" and the Monongahela River in the terms of the Indians was the "river with sliding banks."

(*b*) The railroad services for the coalfields, industries, agriculture, passenger service and work-train service of this area are provided by a single-track line along each bank of the Monongahela River. The Baltimore & Ohio Railroad Co. is the owner of the right-of-way along the eastern bank of the Monongahela River while the New York Central, Pennsylvania and Baltimore & Ohio Railroads are coowners of the right-of-way along the west side of the Monongahela River through Morgantown in both the northern and southern directions. Due to the rugged topography and terrain in this part of the Appalachian range of mountains, railroad roadbed construction is extremely costly and, until the development of industries and coal in Monongalia, Marion, Preston, Harrison, and adjoining counties, the additional cost to provide more than a single-track roadbed was not justified. The greatly advanced cost of material, equipment, and labor required to provide additional roadbed width at this time no doubt will prevent amortization charges for such a project.

Information has been given this office that the capacity of the rail system of the Balitmore & Ohio Railroad between Fairmont, W. Va., and Connellsville, Pa., is badly taxed due to the lack of sidings and the number of trains now operated by the system in this area. The schedule calls for seven trains a day each way through Morgantown on this line. In order to expedite and provide greater volume this section of the system is now operated by diesel-powered locomotives. Two western Maryland trains, with about 80 cars to the train, travel over this single-track line from Elkins, W. Va., to the junction of the main line of the Baltimore & Ohio Railroad near Connellsville, Pa., under the provisions of a 99-year lease agreement with the Baltimore & Ohio Railroad. The single-track system extends from near Uniontown, Pa., through Morgantown to Fairmont, a distance of 61 railroad miles; from Fairmont to Grafton, W. Va., a distance of 25 railroad miles; or from Fairmont to Clarksburg, W. Va., a distance of 21 railroad miles, where the company is operating multiple-track systems.

The coowner system along the west bank of the Monongahela River presently accommodates 7 trains each way a day between Fairmont and Morgantown and 14 trains a day each way from 3 miles north of Morgantown to the junction point about 20 miles west of Brownsville. There are 24.2 miles of single-track railroad between Fairmont and Morgantown and 45.2 miles between Morgantown and the junction point near Brownsville, Pa. About 3 miles of roadbed from lock No. 10 north along the Monongahela River is a continuous and perpetual maintenance problem due to the banks supporting the roadbed sliding into the Monongahela River. Other sections along the west bank of the river are equally objectionable and expensive to maintain due to slips and slides of the upper banks along the roadbed.

(*c*) The highway system over practically all of northern West Virginia consists of the old-fashioned two-lane graded and paved roadways, following the curves and hills along the same routes as traveled in the horse and wagon days. The State Road Commission of West Virginia contends that it is unable financially to construct and maintain highways of modern design, permitting four-or-more lane traffic to replace the present antiquated roadways. During the calendar years of 1948 and 1949 a section of 1.9 miles in length of a highway in Monongalia County was graded and drained, namely, the extension of Beechurst Avenue from Eighth Street in Morgantown to Star City, at a cost exceeding $650,000 or more than $300,000 per mile, with free right-of-way. A part of the project, a two-lane traffic bridge, was constructed over the Monongahela River at Star City at a cost of more than $600,000. During the month of June 1951 the West Virginia State Road Commission awarded three contracts for grading and draining highways in the northern and eastern sections of West Virginia. One of these awards was 0.133 mile in length and the cost was $79,915, or about $600,000 per mile; another was 0.286 mile in length at a cost of $74,045, or about $270,000 per mile; and the third was 0.179 mile in length at a cost of $91,350, or about $510,000 per mile. These figures and costs clarify the statements of West Virginia State Road Commisison as to its inability to provide funds for modern type highway construction.

There is enclosed herewith a United States Geological Survey map, with contours, indicating the mountainous terrain of the area southwest of Fairmont to Morgantown and to the junction of the Monongahela and Cheat Rivers at Point Marion, Pa. Also enclosed are photographs of the track systems through Morgantown that indicate the confined widths upon which the railroad systems must operate.

Giving consideration to the present and future transportation requirements of the Monongahela Valley, with the excessive high costs for construction of modern railroad and highway facilities, and recognizing the present outmoded

and antiquated highway and railway systems of the area with the extremely high maintenance costs, it is evident for the well-being and safety of the United States during an emergency period, and as a national-defense measure, to insure the full productivity of its mineral and industrial resources that the modernization and use of river transportation along the reaches of the Monongahela River should be expedited.

These views are not presented in the interest of the development of Morgantown or any other particular area; neither are they presented in the interest of any private industry, which now or later will develop the metallurgical fields of coal and other natural resources along both sides of this river; but are in the interest of economic stability, full utilization of the very recent investments of the Government, and more particularly the national defense of the Nation. It is trusted your committee will give favorable consideration and approval to the proposal for the new lock-and-dam construction.

Very truly yours,

ELMER W. PRINCE, *City Manager.*

Senator KILGORE. Mr. Chairman, at this point I would like to put into the record extracts from the report of the Chief of Engineers, United States Army, dated May 1, 1949, submitted to the Committee on Public Works of the United States on July 20, 1949, Document 100 of the 81st Congress, 1st session, on this river situation, which I think very well describes the situation.

Senator YOUNG. That will be placed in the record.

(The statement referred to follows:)

EXTRACTS FROM A REPORT OF THE CHIEF OF ENGINEERS, UNITED STATES ARMY, DATED MAY 31, 1949, WHICH WAS SUBMITTED TO THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES ON JULY 20, 1949, DOCUMENT NO. 100, SENATE, 81ST CONGRESS, 1ST SESSION

The canalized Monongahela River serves the important coal-mining, steel and iron, chemical, and other industries located in the Monongahela and upper Ohio River Valleys. The population of the Monongahela Valley along and near the river was over 500,000 in 1940. The Monongahela Valley is rich in natural resources, with coal ranking first in importance, and clay, shale, limestone, sandstone, sand and gravel, gas and oil, and agricultural lands, all contributing to the economic position of the region. Large reserves of bituminous coal, including large quantities with low sulfur content used in the iron and steel industry, are located in Monongalia and Marion Counties, W. Va., which border the river for practically the entire distance above lock 8. Due to depletion of the reserves of low-sulfur metallurgical coal from present supplying districts along the lower Monongahela, it is expected that more intensive development of the upriver sources will occur in the near future. Numerous terminals and transfer facilities are located along the river.

Local interests request improvement of upper Monongahela River by replacement of locks and dams 10 to 15, inclusive, by fewer structures, and lock chambers and channels of adequate dimensions for the type of vessels now in common use on the lower river. They state that the inadequate existing facilities, together with the large number of locks in the relatively short 27-mile reach above Morgantown, places this area at a disadvantage compared with the lower river. The controlling depth over the lock sills and in the pools permits only a 67-percent loading, and tows moving between points on the upper river and the lower river and connecting waterways are penalized throughout the entire haul by limitations of the upper river improvements. In further justification, local interests cite the increased river traffic, the interest in coal resources of the area contiguous to the upper river, and prospective traffic which would result from modernization of facilities.

VIEWS AND RECOMMENDATIONS OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS

The Board of Engineers for Rivers and Harbors concurs in the views of the reporting officers that the existing Monongahela River waterway above lock and dam 8, in general contrast to the section below, is outmoded and inadequate to meet the needs of modern navigation. Replacement of existing locks and dams 10 and 11 by construction of Morgantown lock and dam now in progress is a

forward step toward modernization of the upper river. In the opinion of the Board, replacement of locks and dams 12 to 15, inclusive, by two new structures, raising dam 8, and related channel-improvement work as proposed by the district engineer is advisable in order to enlarge the existing channel to suitable depths and widths and afford facilities for convenient passage of navigation.

TRIBUTARY AREA

Upper Ohio-Monongahela River Valley

The natural resources tributary to the upper Ohio and Monongahela River Valleys, particularly the extensive deposits of metallurgical coal, have led to the development of important industries, coal mining principally, and the production of iron and steel and related products centered at Pittsburgh, Pa., and Wheeling, W. Va. The Monongahela River improvement serves these industries.

Upper Monongahela River Valley

The natural resources of the upper Monongahela River Valley are similar to those which prevailed in the lower river valley. The industrial development is centered at Morgantown and Fairmont, W. Va.

One of the vital requirements of the steel industry is a supply of coal with a sulfur content of 1.25 percent or less which is suitable for carbonization to metallurgical coke. Such low-sulfur coal is obtained by selective mining of low-sulfur beds, or by admixing medium-sulfur coal of about 2 percent and low-sulfur coal of from 0.5 to 1 percent sulfur content. The above table indicates that two of the coals have a sulfur content sufficiently low that they can be used for metallurgical coke manufacture without blending with low-sulfur coal. The Pittsburgh seam in the Pittsburgh, Connellsville, Uniontown, and Brownsville districts has been the chief source of supply of metallurgical coal in the Monongahela-upper Ohio River Valley. The reserve of low-sulfur coal in these districts is decreasing through extensive use. Additional sources of metallurgical coal favorably located with respect to the iron and steel industry in the Pittsburgh-Wheeling area are becoming increasingly important. It is expected that the upriver low-sulfur coals will be more extensively developed in the immediate future.

Upper river locks

Locks and dams 10 to 15, inclusive, are 45 years old, and the locks are now obsolete with respect to usable dimensions for accommodation of lower river types of tows as well as with respect to operation machinery. Locks and dams 10 and 11 are being replaced by the new Morgantown lock and dam. The condition of locks 12 to 15, inclusive, is as follows:

(*a*) *Lock 12.*—The upper guard wall is about 26 feet high with the concrete top on a wooden crib which is only 12 feet in width. This wall is lacking in stability. The lock is difficult to enter from upstream for a 4-barge tow, particularly during high stages.

(*b*) *Lock 13.*—The lock structures are in poor condition. The lower guide wall is founded on bedrock which is higher than the miter sill. This rock extends beyond the face of the wall into the lock approach. The extension cannot be adequately removed without damaging the stone-filled foundation crib. The upper guide and guard walls are concrete structures on stone-filled cribs which are about 10 and 12 feet wide, respectively. These walls are lacking in stability. The concrete structures are in need of repairs. The upper guide and guard walls are of the same length, which makes it very difficult for a tow two barges wide to enter the lock.

(*c*) *Lock 14.*—The general condition of the concrete in this structure is poor. The lower guide wall is built on a stone-filled crib placed on a rock ledge which is higher than the lower miter sill. This rock extends beyond the river face of the wall into the approach of the lock. The extension cannot be removed without damaging the stone-filled foundation crib. The upper guard wall is about 26 feet high with a 12-foot wide stone filled crib for a foundation. The concrete structure is in poor condition.

(*d*) *Lock 15.*—The upper guide wall has no appreciable extension beyond the upper end of the guard wall. No protection is afforded entering tows. This lock is difficult to navigate with more than one barge in a tow. A rock ledge extends beyond the river face of the lower guide wall into the lock approach. The extension could be removed only with difficulty.

Public hearing

A public hearing was held in Morgantown, W. Va., on December 12, 1947, under the direction of the district engineer, Pittsburgh district, Corps of Engineers, Department of the Army, to give interested parties an opportunity to express their views and present statements concerning the improvements desired and their advisability. The hearing was well attended by public officials, representatives of transportation, mining, commercial, and industrial interests, labor organizations, the press, and individuals. A record of the public hearing was transmitted to the Chief of Engineers on January 23, 1948.

Expressions in relation to the public hearing were practically unanimous regarding both the reason for and the type of improvements desired. The principal reason advanced for the improvements was that the existing facilities are inadequate to accommodate modern river traffic. It was pointed out that the large number of locks on the reach, the small size of the lock chambers, and the shallow navigable depth available place river transportation above Morgantown at a disadvantage compared to that on the lower river. The 6 locks in the 27-mile reach of river, each capable of passing only two 26 x 175-foot barges at a time, consume excessive time in lockages. The controlling depth on the lock sills and in the pools permits only about 67 percent loading of barges. Therefore, tows moving between points on the upper river and the lower river and connecting waterways are penalized throughout the entire haul by the limitations of the existing upper river improvements. The recent increase in river traffic, interest in the coal resources of the upper river area, and the estimated prospective traffic which would result from modernization of the river facilities were also cited to show that facilities comparable to those on the lower river are urgently needed.

An important factor contributing to the recent increased coal shipments on the upper Monongahela River was the construction of the Morgantown Ordnance Works in 1940–42. This plant located on pool 10 near Morgantown was operated for the Ordnance Department of the United States Army, by E. I. du Pont de Nemours until 1945 for the production of anhydrous ammonia, methanol, and other chemicals. Since 1946 it has been operated by the Heyden Chemical Corp. and the Sharon Steel Corp. for the production of anhydrous ammonia for use domestically and in connection with the foreign-aid program. The Sharon Steel Corp. operates the 74 coke ovens of the plant which consume 1,800 tons of coal to produce 1,200 tons of coke per day. A river terminal is provided. The entire annual requirements of 650,000 tons of coking coal per annum is barged to the plant.

The Morgantown Ordnance Works is expected to continue in operation indefinitely. It is one of the largest and most modern ammonia plants in the country, and is adaptable to the production of a wide range of chemicals. In the event of curtailment of the current production program the coke oven could be used to produce metallurgical coke for the steel industry. It was for this reason that the Sharon Steel Corp. leased the ovens in 1946 prior to reactivation of the plant for ammonia production which preempted its use for the manufacture of metallurgical coke.

There is little question that the current volume of water-borne traffic on the Monongahela River will continue into the foreseeable future. An expansion of traffic of moderate magnitude on the lower river and very pronounced on the upper river may be anticipated. Coal shipments which result in the bulk of the commerce will continue to be large as long as steel production continues at near capacity rates, and industrial activity remains at its current high level. In an address before the American Chemical Society on September 6, 1948, Dr. Edward R. Weidlin, director of the Mellon Institute for Industrial Research, declared: "It is the belief of many industrial leaders and technical experts that a large development based on coal is in the making and that a considerable expansion in coal production is imminent."

The trend of increase of traffic density upstream will no doubt be accelerated by the continued depletion of reserves of coal suitable for the production of metallurgical coke, along the lower Monongahela River.

Coal is the principal item of potential commerce. Coal reserves within 10 miles of the river are considered potential, from the viewpoint of accessibility, for shipment on the river. The production of the mines located above Morgantown and within 10 miles of the river amounted to 12.75 million tons in the year 1947. The coal reserves are ample to sustain a much greater rate than the current production rate, indefinitely. The lack of adequate navigation facilities on the upper river has retarded the shipment of coal from the contiguous area.

The improved waterway would provide a water outlet similar to that now existing on the lower river, for a large part of the production of the Fairmont coal district.

Tows

The economical size of tows is limited by dimensions of locks and alinement and depth of the channel. Thus tows engaged in coal haul on the lower river generally consist of six 26- by 175-foot barges assembled 2-wide ahead of the towboat, while those similarly engaged above Morgantown generally consist of 2 barges abreast and a small towboat.

Desirable tows, upper river

For economical traffic between points on the upper and lower river reaches, it is essential that, if practicable, the upper river be provided with facilities which would accommodate the 6-barge tow. However, the winding course of the upper river is not conducive to the use of such a tow assembled 2-wide and 3-long ahead of the towboat. Better maneuverability would be obtained by assembling the barges 3-wide and 2-long ahead of the towboat. The new Morgantown lock is designed to accommodate such a tow formation, or equivalent tow.

DIFFICULTIES ATTENDING NAVIGATION

Locks, upper Monongahela River

These locks accommodate only 2 barges of the usual dimensions, 26 by 175 feet, or a tow-boat and 1 such barge. Thus a small tow of only 2 barges and towboat requires 2 lockages and the 6-barge tow requires 4 lockages at each of the locks. Guide walls with lengths of only 80 to 175 feet are available, which add to the difficulty of breaking and reassembling tows. At locks 11, 13, and 15, inclusive, where the upper guide walls do not extend beyond the guard walls, protection for downbound tows entering the locks is not afforded. A serious increase in accidents at the locks has accompanied the increase in traffic during recent years. Although most have been of a minor nature involving damage to concrete walls and gate timbers, there is an ever-present danger of serious damage resulting from a loaded tow colliding with a lock wall already weakened by age.

PLAN OF IMPROVEMENT

Most practical plan

The most practical plan for enlarging the existing channels of the upper Monongahela River to suitable depths and widths is to replace existing locks and dams 10 to 15, inclusive, by 3 new structures and to raise pool 8 by means of a movable crest on dam 8. The new Morgantown lock and dam is already under construction as the first of the replacement structures, for locks and dams 10 and 11. The plan is to continue this type of replacement with supplementation by certain pool dredging. The result would be to place the upper river practically on a par with the lower river.

The current time is opportune for the improvement of navigation facilities of the upper Monongahela River. The existing locks and dams have practically reached the end of their useful life as evidenced by the replacement of existing locks and dams 10 and 11 by the Morgantown lock and dam now under construction. By the time new locks and dams could be completed after the earliest authorization to replace existing locks and dams 12 to 15, inclusive, the latter would be ready for replacement. No charges against the improvements would apply by reason of any remaining value of the existing navigation structures.

DISCUSSION

The existing navigation facilities, locks, dams, and pools 10 to 15, inclusive, on the upper Monongahela River from a point on pool 8 below Morgantown, W. Va., to the head of the river are deficient compared with those on the lower river.

On the lower river, locks, dams, and pools 2 to 8, inclusive, the minimum usable dimensions for lock chambers are 56 by 360 feet compared with 56 by 182 feet on the upper river. Locks 2, 5, and 6 each have double chambers of this size. Locks 3 and 4 have a landward chamber 720 feet long. The lower river locks readily accommodate a coal tow of six 26- by 175-foot barges assembled 2 wide. New locks are contemplated at locks 2 with the main chamber 110 by 720 feet. A new lock is under construction at Morgantown for replacement of existing locks and dams 10 and 11, to have a lock chamber 84 by 600 feet which will accommodate the lower river 6 barge coal tow assembled 3 wide.

The lower river navigation facilities provide for a minimum controlling depth of 10 feet on lock sills and 9 feet in the channel from the mouth of the river to shoals near the head of pool 8. The upper river navigation facilities provide for a minimum depth of only 7 feet on lock sills and in the channel from the shoals of pool 8 to the head of the river.

The capacity of the 26- by 175-foot standard coal barge is 1,000 short tons at 8.8-foot draft and 900 short tons for an 8-foot draft, which is the draft commonly used on the lower river. The controlling depth on the upper river permits a loading of coal barges at only 600 tons which penalizes the economy of the haul throughout its entire length.

The 56- by 720-foot lock chamber accommodates a 6-barge standard or equivalent coal tow and towboat in one lockage. A single 56- by 360-foot lock chamber requires the tow to be broken into 2 sections for 2 successive lockages, and reassembly. Double chambers of this size permit the two sections to be locked through concurrently. The 56- by 182-foot lock chamber requires 4 lockages for the 6-barge standard tow.

Monongahela-Ohio River Valley interests desire that locks and dams 10 to 15, inclusive, be replaced by fewer structures with lock chambers and channel depths of adequate dimensions for the types of vessels and tows now in common use on the lower Monongahela River. For economical traffic between points on the upper and lower river, navigation interests consider it essential to use the basic six-barge or equivalent tow formation in common use on the lower river throughout the entire river.

The most suitable plan for accomplishing the enlargement of the existing channels of the upper Monongahela River to depths and widths comparable with those on the lower river is to replace locks and dams 10 to 15, inclusive, with 3 new locks and dams, and to raise pool 8 by provision of crest gates on dam 8. Locks and dams 10 and 11 are currently being replaced by the new Morgantown lock and dam. Existing locks and dams 12 to 15, inclusive, would be replaced by new locks and dams similar to the Morgantown lock and dam which will have a single lock chamber 84 by 600 feet usable dimensions.

Locks and dams 10 to 15, inclusive, have about reached the end of their useful life. They are now old antiquated structures which require disposition in relation to the navigation project for the Monongahela River and connected waterways.

The proposed improvement of the upper Monongahela River would provide a modern water-transportation facility for the important Fairmont coal-producing district in relation to down-river industrial areas. It would place the upper river on a par with the lower river. The limited navigation facilities available on the upper river have restricted the volume of commerce on the river. The commerce on the upper river has never attained a volume proportional to the valley resources such as has been obtained on the lower river for a long period.

The desired improvement would benefit not only the upper-river region but also the down-river Pittsburgh-Wheeling steel-production area by providing favorable access to the up-river reserves of metallurgical coal.

Senator NEELY. Please let me present Mr. Walter L. Hart, distinguished editor of one of West Virginia's great daily newspapers.

STATEMENT OF WALTER L. HART, NEWSPAPER PUBLISHER, WEST VIRGINIA

GENERAL STATEMENT

Mr. HART. Mr. Chairman, I did not know Job, but I see you in the 1953 version of it. You certainly have had great patience.

I would like to bring to you about 2 or 3 points. First the Monongahela facilities began in 1898 when West Virginia and all of that area was admittedly not developed. It began its development in the area between Connellsville and the greatest area for metallurgical coal, and thus came Pittsburgh's reputation for steel.

Since that time the Connellsville area has been depleted of its metallurgical coal. The steel mills have had to reach out to come up to the largest single block of metallurgical coal that we know anything

about that would be economically feasible for the steel mills to use. The bottleneck there is that the steel mills have to have their coal transported to them chiefly in barges because they are set up to operate that way. The railroads find that their trackage will not hold the terrific loads. For instance, the New York Central has found, and the distinguished Senator Kilgore will tell you, they have to drill their trackage every few feet to hold the tracks from shifting. So it comes back to the fact that the river must reach the steel areas with coal and not just coal but coal of metallurgical quality which will give to steel the great strength that the American steel has been known for throughout the world composed of the ores of the Mesabi Range and of Labrador. So we ask $2,750,000 to eliminate the bottleneck in this production economy for industry to be competitive and to continue to grow. We ask that on the grounds that if the Congress were wise in 1898 in proceeding with the navigation facilities in opening up this great area so that the sinews of war and sinews of peace could come from there, the coke, iron, and steel and all those things, we ask that this lock be modernized so that it can keep up with industry's demands.

EFFECT ON STEEL PRODUCTION

Senator YOUNG. It would make for the cheaper production of steel?

Mr. HART. Yes, sir. For instance, I do not think the steel could be competitive on railroad fuel alone. The costs, of course, are high when your hours for barging are involved instead of minutes. The costs are high when you put 600 tons in a barge instead of 900 tons in a barge. The American people and American labor is worthy of its hire. If you have to use a man 10 hours, the cost is obviously higher than if you can do it in 1 hour.

Senator YOUNG. If you can reduce transportation cost, that is a benefit.

Mr. HART. And if you have the right kind of coal, and I am not an expert on steel. If you have the right kind of coal you can utilize greater wind, and it so happens that in the Fairmont area there are literally thousands of acres of metalurgical coal that the steel mills need. The steel people know that they could put 10 percent more wind on their furnaces because of this peculiar type of high-quality coal which they at this time get at great cost, which will increase their production, and obviously when you increase your production you drop your unit cost.

Senator YOUNG. Thank you for a very fine statement.

Mr. HART. Thank you.

Senator NEELY. Mr. Chairman, our next witness is Mr. John E. Laughlin, the eminent general counsel for the National Steel Corp.

NATIONAL STEEL CORP.

STATEMENT OF JOHN E. LAUGHLIN, GENERAL COUNSEL

PREPARED STATEMENT

Mr. LAUGHLIN. Mr. Chairman and gentlemen, my name is John E. Laughlin, Jr., of Pittsburgh, counsel of National Steel Corp. and Weirton Steel Co.

I am appearing here today on behalf of Mr. Thomas E. Millsop, vice president of National Steel Corp. and president of Weirton Steel Co., who was unfortunately unable to be present. I have filed his statement with the committee, and I would appreciate it being made a part of the record.

Senator YOUNG. That will be done.

(The statement referred to follows:)

STATEMENT OF THOMAS E. MILLSOP, VICE PRESIDENT OF NATIONAL STEEL CORP. AND PRESIDENT OF WEIRTON STEEL CO.

Mr. Chairman and gentlemen of the committee, it is my desire to bring your attention to the urgent and immediate need for additional metallurgical coal to sustain and expand the production of steel for this country. While this type of coal is required by all producers of steel, I feel that I can speak with particular knowledge of the situation with respect to the company with which I work; our problem is typical of the general problem faced by steel producers if the nationwide demand for steel is to be substantially met.

This problem of obtaining coal for expanded steel production is directly related to navigation facilities on the Monongahela River.

Speaking now of the producer, with which I am most familiar, I will state that—

National Steel Corp., on the basis of ingot capacity, is the fifth largest producer of iron and steel products in the United States. It is an integrated producer, which means that, in addition to the ownership of iron and steel producing facilities, National Steel has its own sources of supply of essential raw materials, such as iron ore and metallurgical coal, and it also operates facilities for transporting these constituents of steel to its manufacturing plants.

It directly, or through subsidiaries, operates three important producing units, a blast-furnace plant at Buffalo, and iron and steel manufacturing plant a Detroit, and a similar plant at Wierton, W. Va. The third operation comes under my supervision, as president of the Weirton Steel Co.; it consists of coke ovens, blast furnaces, Bessemer, and open-hearth facilities, and finishing mills at Wierton and additional finishing facilities across the river at Steubenville, Ohio. Our operations at Wierton and Steubenville constitute a completely integrated iron and steel production unit.

Everyone realizes that iron ore is a basic raw material in the production of steel, but few people seem to appreciate that coal is just as essential. Every ton of steel needs about 1.45 tons of coal, as against 1.31 tons of iron ore, for its production. Moreover—and this is most important—it is not just coal that we need; to make steel we must have coking coal, or, more accurately, metallurgical coal. Ordinary coal is plentiful, but coal of metallurgical quality is not.

The steel plants in Pennsylvania, Maryland, and West Virginia and in the Cleveland-Youngstown district of Ohio obtain almost all of their coking coal from one source of supply, and that is the seams of coal located on the Allegheny and Monongahela Rivers upriver from Pittsburgh, Pa. Of these beds of coal, the so-called Pittsburgh seam in Fayette and Green Counties (which the Monongahela River divides in Pennsylvania has been by far the most important. At one time, this source of supply appeared to be inexhaustible, but the unprecedented demands of World War II have so depleted the available reserves of suitable coking coal in Pennsylvania that we must turn to new fields, and not merely for future development, but for immediate use. In this connection, I would like to refer to the report submitted to the Committee on Public Works of the Senate, by the Chief of Engineers, on May 31, 1949, in which it was said:

"One of the vital requirements of the steel industry is a supply of coal with a sulfur content of 1.25 percent or less which is suitable for carbonization to metallurgical coke. Such low-sulfur coal is obtained by selective mining of low-sulfur beds, or by admixing medium-sulfur coal of about 2 percent and low-sulfur coal of from 0.5 to 1 percent sulfur content. * * * The Pittsburgh seam in the Pittsburgh, Connellsville, Uniontown, and Brownsville districts has been the chief source of supply of metallurgical coal in the Monongahela—upper Ohio River Valley. The reserve of low-sulfur coal in these districts is decreasing through extensive use. Additional sources of metallurgical coal favorably located with respect to the iron and steel industry in the Pittsburgh-Wheeling area are becoming increasingly important. It is expected that the upriver low-sulfur coals will be more extensively developed in the immediate future."

It should be noted that the report of the Army engineers refers to the immediate future. Although this reference was made about 2 short years ago, the situation today is much more critical than the author of the report could ever have imagined. We are once more faced with the exorbitant demands on coal made by defense preparations in steel, and we have a new problem to face in the unprecedented expansion of steelmaking facilities in an area which draws upon western Pennsylvania sources of metallurgical coal.

We now use at Weirton about 1,980,000 tons of coking coal a year. This is sufficient to fill about 2,000 standard 1,000-ton coal barges, if (and I emphasize the "if" for reasons which I will develop at a later point) we could load all our barges to capacity. Moreover, this is only part of the picture. To meet the requirements of the defense program, we are now building a fourth blast furnace at Weirton, which will require an additional 715,400 tons of coking coal a year to produce 511,000 tons of pig iron which, with the addition of the usual quantities of scrap, will provide about 964,100 tons of steel. The additional coal tonnage, to use a previous example, would fill 715 standard coal barges, if (and again I emphasize the "if") they could be loaded to capacity.

I trust you will excuse me if at this point I digress to speak with some pride of the investments which our company is making in the expansion for defense program. This fourth blast furnace will require substantial expenditures, but they will be only a fraction of our total expansion investment. National Steel Corp. at Weirton, Buffalo, Detroit, and elsewhere expects to spend no less than $150 million to increase its output of essential iron and steel products. A large part of this, of course, is covered by necessity certificates, but that should not detract from the fact that, despite absurdly high construction costs, we are willing to make a new investment in plant and equipment equal to more than one-third of our total investment up to this time.

Returning to our immediate problem, we have indicated our own increased requirements of coking coal in the area. We also know that other steel producers are planning to build 9 additional furnaces and to enlarge 3 existing facilities, which will draw upon western Pennsylvania for all or substantially all of their metallurgical coal. The increased coal demand of these new and enlarged furnaces will amount to 6,550,000 tons per year, to produce 4,583,500 tons of iron, and of the additional coal used in these furnaces about 2,610,000 tons will move by water on the Ohio River system. The sum and substance of all these figures is this: When the defense expansion program is completed, somewhere in the Pittsburgh area, the industry, including ourselves, will have to find 7,265,400 tons of coking coal a year, of which 3,325,400 tons will move by water.

The logical place to locate this additional coal, and the coking coal which will replace depleted supplies in Fayette and Green Counties, Pa., is in West Virginia, which apparently provides almost unlimited sources of metallurgical fuel. On this point the Army engineers' report, to which I have already referred, says:

"The coal reserves are ample to sustain a much greater rate than the current production rate indefinitely. The lack of adequate navigation facilities on the upper river has retarded the shipment of coal from the contiguous area."

Although many steel producers have been procuring coking coal from the West Virginia mines along the upper Monongahela, we believe that we have pioneered the development of the area by the establishment of our Weirton mine above Morgantown, W. Va. We have invested over $7 million in what we consider the world's most modern mining operation. A very unique part of the project is a tunnel through which we carry coal from our cleaning plant to the Monongahela River on a continuous belt which is 11,200 feet long and which is probably the longest coal conveyor belt in the world.

Other steel producers will follow suit, I am sure, and in the very near future because, as I have already indicated, the exhaustion of coking-coal reserves on the lower Monongahela River is no longer a distant threat. However, there is one serious handicap against this development and against the immediate, full-scale use of the upper Monongahela supplies of metallurgical coal, and that is the dangerously obsolete navigation facilities on the higher reaches of the river.

The steel industry must have the means of transporting its coal, in bulk, in the most economical manner. The vast quantities of coal which are used in western Pennsylvania, northern West Virginia, and eastern Ohio can be moved only by water in huge 1,000-ton barges, at least 6 to a tow.

At the present time there are not enough barges and towboats to move the coal which the steel industry needs and, although the water carriers and the coal and steel companies are investing heavily in new barges and towning equipment, these added facilities will be barely sufficient to meet the increased requirements

of the steel-expansion program and will not provide any better margin of safety.

Navigation facilities on the Monongahela have been generally adequate up to a point near the West Virginia-Pennsylvania division line. The dams have served to provide a 9-foot channel, which will accommodate fully loaded 1,000-ton barges and powerful towing equipment. The locks are long enough to handle the standard 6-barge tow in a single lockage.

Above the West Virginia line, however, the situation has been different. The locks are inefficient and of a size which requires 4 separate lockages to handle the standard 6-barge tow. The channel is only 7 feet, which means that the standard coal barge can be loaded to only 70 percent of capacity under good river conditions and 60 percent of capacity when conditions are unfavorable. To this I may add that these obsolete locks are in very poor physical condition and involve undue navigational hazards.

On these points, the report of the Chief of Engineers, which I have quoted, has this to say:

"These locks accommodate only 2 barges of the usual dimensions, 26 by 175 feet, or a towboat and 1 such barge. Thus a small tow of only 2 barges and towboat requires 2 lockages and the 6-barge tow requires 4 lockages at each of the locks. Guide walls with lengths of only 80 to 175 feet are available, which add to the difficulty of breaking and reassembling tows. At locks 11, 13, and 15, inclusive, where the upper guide walls do not extend beyond the guard walls, protection for downbound tows, entering the locks is not afforded. A serious increase in accidents at the locks has accompanied the increase in traffic during recent years. Although most have been of a minor nature involving damage to concrete walls and gate timbers, there is an ever-present danger of serious damage resulting from a loaded tow colliding with a lock wall already weakened by age.

* * * * * * *

"The lower-river navigation facilities provide for a minimum controlling depth of 10 feet on lock sills and 9 feet in the channel from the mouth of the river to shoals near the head of pool 8. The upper-river navigation facilities provide for a minimum depth of only 7 feet on lock sills and in the channel from the shoals of pool 8 to the head of the river.

"The capacity of the 26-by-175-foot standard coal barge is 1,000 short tons at 8.8-foot draft and 900 short tons for an 8-foot draft, which is the draft commonly used on the lower river. The controlling depth on the upper river permits a loading of coal barges at only 600 tons which penalizes the economy of the haul throughout its entire length."

The Congress has made a good start in the direction of eliminating these formidable bottlenecks in upriver navigation. A program to substitute 3 modern locks and dams for the 6 obsolete structures, known as locks 10 to 15 (reaching from the West Virginia line to the head of navigation at Fairmont), has been authorized by the Congress. The first step in the program has been taken and substantially completed; locks 10 and 11, near Morgantown, have been replaced by the new Morgantown locks and dam, a very modern and efficient facility.

But the program as a whole is almost worthless until it is completed. It does no good to have a deeper channel at Morgantown or facilities which will handle a standard tow of six fully laden barges if the tows must first traverse the obsolete upriver facilities.

To demonstrate the difference between the modern Morgantown facilities and the next lock and dam, No. 12, we have had photographs taken of both facilities from the air. I would like the committee's permission to introduce them in the record. I would also like to present companion photos, in which we have sketched in the movement of a standard six-barge tow. A casual comparison of both sets of photographs will immediately demonstrate the difference in efficiency and economy. And remember, gentlemen, the 6 barges you see in the modern structure can carry 6,000 tons of coal, whereas these same barges in lock 12 are limited to about 3,000 tons. When you expect to move about 1 million tons a year, which is our immediate goal, the difference in loading capacity becomes a very costly item. I shudder to think of the difference this will make when we reach our hoped-for production of 1.6 million tons a year.

In World War II, practically all of our production was devoted to the war effort. Today, history seems to be repeating itself. In June 1951, 63.4 percent of our production at Weirton was shipped on governmental ratings and directives. This does not include our tin-plate production which was not on allocation but which we know goes into military and essential civilian uses. Moreover, we

expect that the requirements of the defense program will constantly increase; in anticipation, as I have indicated, we are making the huge investments required to increase our pig-iron output at Weirton by about 511,000 tons a year.

Other shippers of coal and other commodities on the upper Monongahela are also engaged in defense production. I am quite sure that their efforts to aid the defense program will be substantially assisted, as ours will be, if the obstacles to full production posed by obsolete navigational facilities are eliminated.

We are told that no provision has been made for these needed facilities because they represent a new project and new civilian projects are to be subordinated to the defense program. The conclusive answer is that it is not a new project, but the continuation of a program already begun, and, most important, it is directly related to the defense effort.

I can think of no better way to close my statement than by reference once again to the report of the Chief of Engineers, in which it is said:

"The proposed improvement of the upper Monongahela River would provide a modern water-transportation facility for the important Fairmont coal-producing district in relation to downriver industrial areas. It would place the upper river on a par with the lower river. The limited navigation facilities available on the upper river have restricted the volume of commerce on the river. The commerce on the upper river has never attained a volume proportional to the valley resources such as has been obtained on the lower river for a long period, favorable access to the upriver reserve of metallurgical coal.

"The desired improvement would benefit not only the upriver region but also the downriver Pittsburgh-Wheeling steel-production area by providing favorable access to the upriver reserves of metallurgical coal."

It is my believe that the continuation of the project is essential to the defense program and that the construction of the next lock and dam at Hildebrand should be undertaken as promptly as possible.

STEEL PRODUCTION OF AREA

Mr. LAUGHLIN. I would like to highlight a few of the remarks of the previous witnesses. They have emphasized that to make steel you need metallurgical coal. Perhaps even more significant is that to make 1 ton of steel you require 1½ tons of metallurgical coal. The Pittsburgh district in a year produces about 30 million tons of steel, which means that it requires about 45 million tons of metallurgical coal. Unfortunately, not all coal is metallurgical.

Senator YOUNG. Where are the main deposits of metallurgical coal?

Mr. LAUGHLIN. So far as the eastern part of the United States is concerned, Mr. Chairman, we find the main deposits of metallurgical coal in the area just above Pittsburgh, in what you might call the Brownsville-Connellsville district and also in that area around Morgantown and Fairmont. We also have some metallurgical coal above Pittsburgh on the Allegheny, but it is not as satisfactory as the metallurgical coal we find in Fayette County, Pa., and in Marion and Monongalia Counties in West Virginia.

Our company alone uses about 2.5 million tons of coal a year. One of the preceding witnesses emphasized that the coal on the Monongahela immediately above Pittsburgh is running out. We have found that to be so in our case. We have a mine in Fayette County, Pa., upon which we used to depend for our supply of metallurgical coal. That mine is now rapidly approaching exhaustion; so that, in order to acquire coal for our operations, we had to move upriver into this area. I think eventually that all of the steel companies in the Pittsburgh district will have to do the same. We feel that the construction of this facility is essential not only in our own interests but to encourage the other steel companies to move into this area and develop this large body of metallurgical coal.

OBSOLETE LOCKS

Some of the other witnesses have emphasized the fact that these facilities, locks 12, 13, 14, and 15, are obsolete. I know that it is not possible to include these pictures in the record, but I would like to submit some for examination by the committee. My first picture, exhibit No. 1, is old lock 11, which is of the same type as these remaining obsolete locks.

Exhibit No. 2 shows that same lock trying to handle a modern tow. The lock, you will note, is only large enough for two barges, and the remaining four barges of the two must be locked through subsequently. Even more significant than that is the fact that these barges that you see there going through 2 at a time are only loaded to 60 percent of their capacity, and we are using a 1,000-ton barge to carry 600 tons of coal.

If we turn to exhibit No. 3, we see the new lock and dam at Morgantown without a tow. That is the type of lock which we are advocating for Hildebrand.

Exhibit No. 4 shows this same modern lock handling 6 barges and a towboat in 1 lockage. These barges, if it were not for the obsolete facilities above Morgantown, could be loaded 100 percent with 1,000 tons of coal per barge.

PARTIALLY LOADED BARGES

There is another element herein that not only must you go through these lockages and only partially load your barges but you cannot use large-size towing vessels because they simply cannot navigate in this shallow part of the river. So, as I say, it appears to us that this is a very important project from the standpoint of ourselves and of the steel industry as a whole. We actually do not regard this as a new project. After all, there has been a campaign over the years to modernize the locks and dams on the Monongahela River, and it has reached this point, and it seems to us that it is good business sense for the Government to continue the program up to the height of navigation on the river which would require first the completion or the construction of this Hildebrand Dam and then after that another dam above it which would provide 2 modern facilities to replace 4 obsolete ones.

Thank you.

Senator YOUNG. Thank you.

Senator NEELY. Mr. H. A. Bangert, of the Weirton Steel Co., will please proceed.

WEIRTON STEEL CO., WEIRTON, W. VA.

STATEMENT OF H. A. BANGERT, ASSISTANT TO THE PRESIDENT

PREPARED STATEMENT

Mr. BANGERT. I would like to submit a statement for the record and make just a brief remark here, elaborating on Mr. Laughlin's statement.

Senator YOUNG. Your statement may be made a part of the record.

(The statement referred to follows:)

STATEMENT OF H. A. BANGERT, ASSISTANT TO THE PRESIDENT, WEIRTON STEEL CO., WEIRTON, W. VA.

The Congress of the United States has previously authorized the improvements of the upper Monongahela River in West Virginia by the replacement of 6 old locks and dams of 1903 vintage with 3 new locks and dams of modern size and structure to accommodate the terrific increase in traffic amounting to more than 2,000 percent increase in the past 15 years.

One of the authorized locks and dams has been completed at Morgantown, W. Va.

Appropriations are needed to complete the project already authorized and started. The United States Army engineers have completed the survey work for the next lock and dam which will replace old locks and dams Nos. 12 and 13. The improvement of the upper Monongahela River is vital and imperative at this time as a matter of national security in a number of ways.

The Monongahela River rivals the famous rivers of the world in the potential wealth along its banks.

Its waters each year carry more than 30 million tons, greater than of any light draft inland waterway in the world. Its annual tonnage amounts to more than that of either the Panama or Suez Canals. It supplies the vital steel industry in the Pittsburgh-Ohio-West Virginia area known as the Arsenal of Democracy. Forty miles of great steel mills, wire and paper mills, coal terminals, and general industrial development stretch along its course in an unbroken line. It is here that the industrial heart of our Nation pounds the beat of prosperity and national security. Here is located the largest inland port in the world. Here is produced 35 percent of the Nation's steel, for every ton of which 1.45 tons of metallurgical coal are needed. It is here in the Pittsburgh area that the great mouths of the roaring furnaces of the steel industry roughly consume 50 million tons of metallurgical coal annually, all of which in the past has been coming from the lower reaches of the Monongahela River in the Pittsburgh vicinity. This coal has been practically depleted. The industry now looks to the upper reaches of the Monongahela River in West Virginia near the Morgantown district for metallurgical coal, where an estimated 100 years' supply is available in 3 counties. It is in this locality over a length of only 24 miles that the new locks and dams are badly needed. This project, as approved by the Army engineers and a hundred or more industries and organizations, can be properly justified under the following headings:

1. "Critical to the Steel Industry."
2. "Vital to National Security."
3. "Obsolete Locks on Upper Monongahela Conclusively Inadequate."

CRITICAL TO THE STEEL INDUSTRY

The industrial growth in recent years has been rapid along the Ohio and the Monongahela Rivers. On the lower Monongahela River, near the mouth in the Pittsburgh district, river improvements have for years kept pace with industrial expansion. More than 30 million tons pass through lock and dam No. 2 annually on the Monongahela near Pittsburgh. A great part of this tonnage consists of coal to feed the vital steel industry. With the improved locks and dams and 9-foot channel depth in this area, the above tonnage was made possible.

While the lower Monongahela River in the Pittsburgh area kept pace with expanding industry and brought prosperity and security to the district and the Nation, the upper Monongahela River for the past 50 years remained unimproved, discouraging the expansion of industry and the opening of new coalfields in that area.

In spite of the lack of improvements on the upper Monongahela in West Virginia with its 1903-model locks and dams and shallow water, tonnage between Morgantown, W. Va., and Fairmont, W. Va., increased 2,000 percent during the period 1938–46. The coal from the mines bordering almost the entire length of the Monongahela has been transported by barge to the Pittsburgh area largely for consumption by the steel industry.

In the early days this coal movement originated from mines along the Monongahela River near Pittsburgh which resulted in short hauls to the steel mills in the Pittsburgh vicinity. Now these mines of metallurgical coal have approached exhaustion. The steel and other industries have shifted upstream into West

Virginia from whence the future coal supply must come. This movement upstream into West Virginia for vital industrial coal was predicted 30 years ago when the Army engineers reported to Congress:

"Eventually it will be necessary to go farther upstream to obtain coal for river shipments."

A large supply of the metallugrical coal is available in the Morgantown-Fairmont, W. Va., area bordering on the river with an estimated 100 years' supply at the present rate of consumption. There is no place else to go for this type of coal. The locks and dams on the upper reaches of the Monongahela River in West Virginia have outlived their full usefulness and are no longer adequate to handle the constant growing tonnages which are developing in the area. Unless these improvements are made and this metallurgical coal is made available to the steel industry in the Pittsburgh area, the matter of steel production and national security will become one of the most critical ever to be faced by this Nation.

VITAL TO NATIONAL SECURITY

However, more important than economic and industrial expansion is the matter of national security. Metallurgical coal is essential in making steel and wars cannot be fought without steel. The industry must of necessity in the immediate future have access to the vast coal reserves bordering on the upper Monongahela in West Virginia which is the largest coal-producing State in the United States and contains some of the best coal in the world practically unscratched with many years' supply. During these troublesome times of unsettled world affairs and conditions abroad, it is vital in the matter of national defense and security that the authorized improvements on the upper Monongahela be realized at the earliest possible date so that these river facilities, now obsolete and inadequate, may become an additional arm of transportation and aid to the railroads. If appropriations were immediately provided for this project, it would require approximately 4 years before the project could be completed. The question is, Can we wait that long?

Another angle of national defense enters into the coalfields in the vicinity of the upper Monongahela River.

In 1944, Congress passed the Synthetic Liquid Fuels Act, appropriating approximately $30 million for research and development work. Pilot and demonstration plants have been erected and laboratory and field tests are being made in Morgantown, W. Va., in the Pittsburgh district, and elsewhere. Although at this time we are not confronted with any immediate shortage of petroleum, we must, however, from the military viewpoint, be prepared as we cannot depend on oil concessions in foreign lands in time of war. The risks would be too great to rely on such sources. We must be prepared, if necessary, to produce synthetic oil and gasoline from domestic coal. The United States is importing at this time approximately 1 million barrels of oil daily. Recent experiments in industrial and governmental synthetic fuels research have shown conclusively that our liquid fuel supplies do not depend entirely on petroleum but can be supplemented from our large reserves of coal. The billions of tons of nonmetallurgical coal available along the upper Monongahela River in West Virginia could, of necessity, be used for this purpose. Conditions in Iran, the source of one-fourth of the world's oil supply, justifies serious consideration to this matter. The New York Daily Times, under date of September 12, 1948, published the following statement:

"The United States is on the threshold of a profound chemical revolution. The next 10 years or 15, will see the rise of a mass of new industries which will free us from dependence on foreign sources of oil. Gasoline will be produced from coal, air, and water on a scale so huge that it will dwarf even the giant synthetic rubber industry born in desperation during World War II."

On may 9, 1949, the Department of the Interior stated as follows:

"Liquid fuel can be made out of coal at a price not too far above oil prices. The vast coal deposits of the Nation can now be accepted as part of our liquid fuel reserve, thus enormously expanding our known reserve of liquid fuel."

Sometime ago Mr. Pursglove, vice president of the Pittsburgh Consolidation Coal Co., testified before a House committee that the national emergency may necessitate more rapid development of synthetic oil techniques, and the Pittsburgh Consolidation Coal Co., the world's largest coal company, had started construction of a half-million dollar pilot plant near Pittsburgh to gasify and liquefy coal. The firm planned at that time to later construct a $120 million commercial

scale plant near Pittsburgh. Mr. Pursglove emphasized that none of the huge coal reserves allotted for this purpose is suitable for the steel industry. He was referring to the coal reserves in West Virginia and western Pennsylvania.

On July 3, 1951, the Secretary of Interior set up a committee of oil company officials to plan for possible emergency worldwide reorganization of American petroleum facilities. The action emphasized the threat the United States Government sees to the Western World's oil distribution and supply system from the difficulties in Iran.

It has been stated that the participation of Germany in World War II would have been of much shorter duration had it not been for her synthetic fuels.

The synthetic fuel pilot plants operating in the Pittsburgh and Morgantown area have been set up in these districts with the expectation, if necessary, of using the vast coal reserves along the lower and upper Monongahela River, of which amount the vast high percentage will come from the vicinity of Morgantown, thus the necessity of improving the channel and locks and dams in that area.

OBSOLETE LOCKS ON UPPER MONONGAHELA CONCLUSIVELY INADEQUATE

The Monongahela River is formed by the junction of the West Fork and Tygart Rivers about 2 miles above Fairmont, W. Va. The name "Monongahela" is derived from the Indian, meaning "falling banks." It flows almost directly north to Pittsburgh, a distance of 128 miles, where it joins in the heart of Pittsburgh with the Allegheny River to form the Ohio. On the upper reaches of the river, between Fairmont where the river is formed, and Morgantown, 24 miles from Fairmont, the greater part of this metallurgical coal lies. More than 3 billion tons within an area of 10 miles on each side of the river between Morgantown and Fairmont is available. It is believed that this critical program for the upper Monongahela River may be clarified and made more crystal clear by setting forth the following facts and submitting the attached photographic descriptions.

From Fairmont, W. Va., at lock and dam No. 15, the last lock and dam in the upper reaches, to Morgantown, W. Va., the river mileage is 24 miles.

From Morgantown, W. Va. (lock and dam No. 10) to the mouth of the Monongahela River at Pittsburgh, the river mileage is 102 miles.

Between Fairmont and Morgantown, a distance of 24 miles, lie the millions upon millions of tons of metallurgical coal so vitally needed. Here, too, are many more millions of tons of nonmetallurgical coal.

Between Morgantown, W. Va., and Pittsburgh, Pa., a distance of 102 river miles, the river channel is 9 feet or more in depth with modern locks and dams.

Between Fairmont and Morgantown, W. Va. (24 miles) the river channel is 7 feet in depth and at times only 6 feet in the dry season. The locks and dams are obsolete and small in this area, having been constructed in the period 1897–1903. There were 6 of these obsolete locks between Morgantown and Fairmont over a very short distance of only 24 miles, which is an average of a lock for every 4 miles. It has been proposed and authorized to replace these 6 old locks with 3 modern locks and dams.

The new lock and dam at Morgantown has replaced two old locks Nos. 10 and 11.

Under present locking conditions and 7-foot channel depth, it requires 5½ hours for a 6-barge tow loaded 63 percent capacity traveling north to navigate a distance of 8 miles to the Morgantown new lock and dam. Two and one-half hours are required to lock this tow through 1 obsolete lock which requires 4 lockages. This same tow is locked through the new lock at Morgantown in one lockage requiring 30 minutes to complete. From then on into Pittsburgh the lockages are modern.

From Morgantown, W. Va., to Pittsburgh, Pa. (102 miles), this tow navigates through modernized locks and dams and a 9-foot channel. However, the tow is loaded only 63 percent capacity. Because of the channel depth of 7 feet for 8 miles above Morgantown, this tow is penalized and is required to navigate the 102 miles into Pittsburgh loaded only 63 percent of capacity. This tow is hauling metallurgical coal vital to the steel industry. It requires 1.45 tons of this coal to produce 1 ton of steel.

One large coal mine now in operation 8 miles above Morgantown, will be producing 1,800,000 tons of metallurgical coal annually for the steel industry. It would require 36,000 railroad coal cars to transport this coal to Pittsburgh—2,000 river coal barges will do the job. There are, along the river in this section, 24 other such mines, some smaller, which will load on the river when proper improvements are made.

Railroad facilities cannot possibly haul the amount of coal that will be mined. For a 6-month period ending December 31, 1951, the railroad in this section was able to supply only 55.1 percent of the cars ordered for the mines in Marion and Monongahela Counties in West Virginia. The dire need for railroad cars is evidenced by certificates of necessity issued to the railroads whereby investments made in freight cars can be depreciated within 75 percent of their value within 5 years.

The urgent need for these improvements on the upper Monongahela is further evidenced by the fact that 35 percent of the total output of approximately 100 million tons of steel produced annually in the United States comes from the Pittsburgh area. This 35 percent of steel production, or 35 million tons, in the Pittsburgh area requires approximately 1.45 tons of metallurgical coal to produce 1 ton of steel. The Pittsburgh area, therefore, will require approximately 50 million tons of metallurgical coal annually. It is conceded by all persons informed on this matter that this coal will have to come from the upper reaches of the Monongahela River in the Morgantown area. To transport this amount of coal by railroad would require more than 1 million railroad coal cars. This same amount of coal can be transported by river in 50,000 barges loaded to capacity.

It is known, of course, that steel-mill facilities are set up and geared to receive this metallurgical coal by river transportation, and the barge conveyor and loading means. This is one reason why steel mills have been located along the rivers.

PHOTOGRAPHIC EXHIBITS

Attached hereto and marked "Exhibit No. 1" is an aerial photograph of old lock and dam No. 11 which has been removed by dynamiting and replaced by new lock No. 10. This old lock is 182 feet in length and 56 feet in width.

Attached hereto and marked "Exhibit No. 2" is also a photograph of old lock and dam No. 11. A tow consisting of six barges and a towboat is passing through the lock. Four barges have been passed through and two barges are in the lock about to pass through. The towboat is waiting to the left to enter the lock. It requires 2½ hours' lockage time to lock these 6 barges and tow through this obsolete lock.

Exhibit No. 3 aerial photograph is that of new lock and dam No. 10 replacing old locks and dams Nos. 10 and 11. This lock is 600 feet long and 84 feet wide.

Exhibit No. 4 aerial photograph also shows a photograph of new lock and dam No. 10. It is noted that 6 large barges of coal are being towed through this new lock with 1 lockage. Time required—30 minutes. The 6 barges passing through new lock No. 10, 3 abreast, have been loaded to 63 percent capacity at a mine 8 miles upstream to the left of the photograph exhibit No. 4. In traveling these 8 miles to enter this new lock No. 10, exhibit No. 4, the tow consumed 5½ hours, 2½ of which were lost in passing through obsolete lock No. 12 and reaching new lock No. 10. This exhibit No. 4, new lock No. 10, is located at Morgantown, W. Va. This tow loaded 63 percent capacity must now travel 102 miles into Pittsburgh only partially loaded whereas the river facilities from Morgantown on into Pittsburgh could readily transport the tow loaded 100 percent capacity, or 1,000 tons to a barge.

The extreme right of aerial photograph exhibit No. 4 contains a 9-foot river channel. Upstream to the extreme left of aerial photograph exhibit No. 4 is a 7-foot channel. Consequently, the barges, in entering lock and dam No. 10 can only be loaded to 63-percent capacity in view of the 7-foot and sometimes lesser channel.

In closing it is well to state that the Rivers and Harbors Congress, a nonpartisan, nonprofit group organized 50 years ago for the purpose of promoting the sound and orderly development of our national waterway and land resources, reported on May 11, 1951, that it had classified the Monongahela River project as No. 1 in its class 1 list. In other words, this congress has placed the Monongahela River project as being the most vital river improvement in the United States. In the words of the report, this congress is "convinced that the project is sound, needful, and sufficiently advanced in status and should be promptly constructed in the public interest."

It should be noted that this ringing recommendation was made, not by a Pennsylvania or West Virginia organization which might have had a special interest in the subject matter, but that it was proclaimed by a quasi-public group, the membership of which includes outstanding public-spirited men from almost every State in the Union.

It can be readily seen that the improvements advocated for the upper Monongahela River in the Morgantown area cannot be considered as a new project. The new lock and dam constructed at Morgantown a couple of years ago is of little or no benefit at this time without the completion of two additional new locks and dams already authorized. It can be also seen that the millions and millions of tons of vital metallurgical coal are located along the 24-mile stretch above the new Morgantown lock and dam No. 10. In order to reach this coal and transport it in fully loaded barges, the channel must be deepened to a 9-foot channel from a 7-foot channel and the 2 additional locks constructed.

The Army engineers have completed their survey of the next lock and dam in the series of three and are ready to start construction at any time. This survey was completed recently after $35,000 had been allotted by the last session of Congress for the cost of the survey.

IMPORTANCE TO STEEL INDUSTRY

Mr. BANGERT. Steel mills are built along the river for two reasons. First, it takes 15 tons of water to make a ton of steel. Secondly, you have the matter of transportation. Steel mills are geared so as to get their coal by river transportation. It is impossible to bring coal into the setup of mills today by rail because there are no facilities to unload it. It is all done by conveyor system on the river.

Now the Monongahela River, as you know, carries more tonnage than the Panama Canal. The mills have been built along the river so as to get the coal in there that has been transported from the upper part and the lower part of the river. West Virginia is the largest coal-producing State in the United States, and this metallurgical coal is the only coal we have in the eastern part of the United States that we can go to now, and due to the fact that the coal where we are getting it now is becoming exhausted, we have little choice.

In 1951, the last records that I have, only 51 percent of the coal cars were furnished to the coal industry in West Virginia compared to the 100 percent requirement. In addition to that it would require 1 million freight cars to move the necessary 40- to 50-million tons of coal needed in the Pittsburgh area while 60,000 barges would move this same amount of coal.

Consequently these locks are necessary not only to the economic condition in the vicinity of Pittsburgh and West Virginia, but also from a national defense angle.

Thank you very much.

Senator YOUNG. Thank you.

Senator NEELY. Please let me present honorable and able Ezra Hamstead, former assistant district attorney of the United States for the northern district of West Virginia, representing the Chamber of Commerce of Morgantown, W. Va.

CITY OF MORGANTOWN, W. VA.

STATEMENT OF EZRA HAMSTEAD, ON BEHALF OF THE CHAMBER OF COMMERCE

UPPER MONONGAHELA VALLEY DEVELOPMENT

Mr. HAMSTEAD. May it please the chairman, I have just this to say, supplementing what has heretofore been said. I do represent the Chamber of Commerce of Morgantown. We are particularly interested, of course, in the development of the upper Monongahela valley. In the old PWA days, which we all hope will never return, the Gov-

ernment went up to one of the headwaters of this Monongahela River and constructed a flood-control dam at an expenditure of $16 million. That dam is now in operation and can control the headwaters to the extent that in dry seasons water can be released to keep the upper Monongahela River navigable.

Supplementing that expenditure, the Government in 1948 and 1949 built this new lock and dam of which you have a picture at Morgantown, No. 10, at an expenditure of $8.5 million.

It is between the dam on the Tygart River, the head of the waters of this Monongahela River, and No. 10, that the metallurgical coal lies, and all the other resources pointed out by the State geologist. But in order to utilize those two heavy expenditures, another dam is needed, and that is the Hildebrand Dam No. 11. With the construction of that dam both of these two big expenditures made by our Government in the period of depression and in the period of prosperity can then become utilized and serviceable.

OPENING OF NEW COALFIELDS

One more dam opens up the coalfields that we are talking about, and it utilizes both Government expenditures heretofore made, but without one more dam those two great expenditures are of little use.

Let me point out this fact for the chamber of commerce, which is very anxious for this industrial development. It is truly an investment that the director of internal revenue in West Virginia will soon have completely restored all expenditures made by this Congress in the way of income taxes if these new developments can be provided for. It would not be long until the Government would be fully and completely reimbursed by taxes paid by not only industry but by labor for any expenditure, Mr. Chairman, that this present Congress can authorize.

Thank you.

Senator NEELY. Thank you very much, Mr. Chairman.

Senator YOUNG. Thank you, Senator Neely. I think all of your witnesses did an excellent job here this morning, and when the bill is marked up I assure you that I will call these projects to the attention of the committee; I think they have great merit.

Senator NEELY. Thank you very sincerely for the courteous and patient manner in which you have conducted the hearing.

Senator YOUNG. After all, the Congress belongs to the people.

I might say that there is a statement here from Chester C. Thompson, president of the American Waterways Operators, Inc., and it will be made a part of the record.

(The statement referred to follows:)

STATEMENT OF CHESTER C. THOMPSON, PRESIDENT, THE AMERICAN WATERWAYS OPERATORS, INC., WASHINGTON, D. C., IN SUPPORT OF AN APPROPRIATION FOR CONSTRUCTION OF PROPOSED LOCKS AND DAM ON THE OHIO RIVER AT NEW CUMBERLAND, W. VA.

My name is Chester C. Thompson. I am president of the American Waterways Operators, Inc., a voluntary nonprofit national association of domestic water carriers and operators serving the inland rivers, canals, and waterways, and the bays, harbors, and sounds of the United States. The association maintains its principal office at 1319 F Street NW., Washington, D. C., with regional offices in New Orleans and New York City. It is the policy of this association to endorse and urge the consummation of navigation improvements that are economically feasible and justified.

The purpose of my appearance here is to emphasize the necessity for an appropriation to enable the building by the Corps of Engineers of a modern dam and locks on the Ohio River at New Cumberland, W. Va., 56.7 miles below Pittsburgh, Pa., at a total estimated cost to the United States of $45,600,000. The proposed New Cumberland dam and locks will consist of a high-level dam and 2 modern locks—a riverward one 1,200 feet long by 110 feet wide, and a landward one 600 feet long by 110 feet wide. The proposed project will replace locks and dam Nos. 7, 8, and 9, which are 36.5, 46.4, and 56.1 miles, respectively, below Pittsburgh, Pa. These existing installations have only 1 lock, 600 feet long by 110 feet wide.

The Ohio River, of which the New Cumberland dam and locks will be a significant unit, is one of the most important inland waterways in the United States. It transports a heavy volume of commerce annually from its source to its mouth. The Ohio River flows through and serves one of the richest and most highly industrialized sections of this Nation, which includes the Pittsburgh-Wheeling area, the largest steel-producing region in the United States. It is also of untold benefit to commercial, manufacturing, mining, and agricultural interests of the States of Pennsylvania, Ohio, Indiana, Illinois, Kentucky, and West Virginia. In fact, because of the accessibility of modern and economical inland water transportation on the Ohio River system, the Ohio Valley is one of the fastest growing industrial regions in this country.

The Ohio River is of tremendous value to the trade and commerce of the entire United States. As an arm of the great Mississippi River system, it provides the vast region along its banks with through economical inland waterway routes to and from the midcontinent area. Almost 50 percent of the people of the United States live and work in that area, which accounts for more than 45 percent of the total manufactures of the Nation, at least 60 percent of the total value of its farm production, and around 70 percent of the value of all of its metallic and nonmetallic mineral products.

Along the Ohio River are steel mills and steel fabricators, automobile assembly plants, oil refineries and tank farms, chemical manufacturers, large powerplants, coal mines and coal handling facilities, in addition to a vast assortment of heavy industry, which are dependent upon and substantial users of this waterway. Moreover, plans have been consumated recently to locate Atomic Energy Commission plants in the Ohio Valley near Portsmouth, Ohio, and at Kevil, Ky., near Paducah. The electric powerplants serving these facilities will make extensive use of the Ohio River for the receipt of coal and other fuels. It can be asserted without hesitation that the money spent so far on the improvement of this waterway represents a high-grade investment of public funds, returning benefits to the people fully as important as those of any major trunkline railroads.

With the improvement of the Ohio River, many new business and industrial facilities have been attracted to its banks in order to have the advantage of modern, economical, and efficient inland waterway transportation. This development is continuing and increasing year by year. The effect of low-cost inland waterway transportation on the location of industrial establishments along the Ohio River is excellently demonstrated by the extensive use thereof in the case of companies refining and marketing petroleum products. In 1929 there were 16 waterway terminals along this waterway for the handling of petroleum products; at the beginning of 1953 there were 102 such terminals, having an aggregate capacity of 13,408,103 barrels and individual capacities ranging from 2,400 to 1,187,000 barrels. Many of these terminals are on the upper section of the Ohio River and, thus, would require movement of their waterborne traffic through the proposed New Cumberland dam and locks.

In addition to the development of oil terminals, since the close of World War II in 1945, concerns producing, marketing, or distributing the following commodities or services have established or have arranged for the establishment of new or additional business facilities or docks along the Ohio River:

acids	fluorspar	steam separators
automobiles	grain	rayon
benzol	grain products	sand and gravel
chlorine	iron articles	scrap metals
coal	steel articles	slag
coke	marine ways	warehousing
electric power	boat repair yards	public terminals
gas	plastics	
ferroalloys	radiators	

The establishment of all these industrial facilities along the Ohio River has contributed materially to its importance and growth as a traffic artery.

That the industrial growth cited is no mere hearsay is apparent by reference to some of the facilities that have selected locations along the Ohio River in 1952 and 1953. Among these are:

1. A new $22 million chlorine-caustic soda plant at Round Bottom, W. Va.
2. A $4,500,000 maleic anhydride and fumaric acid plant near Moundsville, W. Va.
3. Construction of a $24,750,000 coke plant at Weirton, W. Va.
4. United States Government's new supertropical bleach plant at Natrium, W. Va., to cost approximately $2 million.
5. Expansion of production facilities at a chemical plant at Natrium, W. Va., consisting of expenditures of $8,800,000 to increase production of chlorine and caustic soda and $3 million for production of tetrachloride.
6. New coal handling facilities at West Columbia, W. Va.
7. A $145 million steam electric generating plant of 1 million kilowatt capacity near Cheshire, Ohio, to service the Atomic Energy Commission's new uranium diffusion center near Portsmouth, Ohio.
8. A $100,000 coal dock at Martins Ferry, Ohio.
9. A $200,000 terminal at Cincinnati, Ohio, for handling coal from railroad cars to barges.
10. A multimillion dollar river terminal planned for Cincinnati, Ohio, by the Pennsylvania Railroad with a capacity of 3 million gallons of diesel fuel oil to supply its diesel locomotives.
11. A $6,030,000 synthesis gas manufacturing plant; a $5,740,000 nitrophosphate plant; and a large urea manufacturing plant at South Point, Ohio.
12. Napthalene and quinoline plant at Ironton, Ohio.
13. A $5,740,000 phenolic resins plant at Marietta, Ohio.
14. A 33,600-barrel capacity petroleum products storage terminal at Marietta, Ohio.
15. Addtion to a powerplant at Dilles Bottom, Ohio, costing $41,500,000.
16. A 100,000 kilowatt generating plant at New Richmond, Ohio, with facilities to unload 600 tons of coal per hour from barges.
17. New plant facilities at Louisville, Ky., for the General Electric Co.
18. Opening of an $8,500,000 coal mine with an annual capacity of 2 million tons at Uniontown, Ky., employing 300 persons.
19. A $12,500,000 steel conversion plant at Owensboro, Ky., to employ 350 persons.
20. An $88 million steam plant for generating electric power built by the Tennessee Valley Authority near Puducah, Ky.
21. Largest inland terminal in the Nation at Louisville, Ky., in a 130,000-square-foot building costing an estimated $1,200,000, for linking river, rail, and truck transportation facilities.
22. A large $280 million steam electric generating plant at Madison, Ind., to produce 1,200,000 kilowatts and service the Atomic Energy Commission's plant near Portsmouth, Ohio.

In addition to the facilities listed herein, consideration has been given to sites near Utica or New Albany, Ind., for a 600,000-kilowatt powerplant using 2 million tons of coal per year. With the exception of the plant constructed by the Tennessee Valley Authority, all of these facilities represent investments by private industries and firms. This increasing industrial growth is the impetus for the constantly growing volume of traffic on the Ohio River.

The importance of the Ohio River to national defense should not be overlooked. Besides providing a vital transportation route for millions of tons of strategic commodities such as coal, sulfur, petroleum products, and iron and steel articles during World War II, this waterway was transited by many vessels built at shipyards along its banks which were highly essential to the war effort. A number of these vessels moved from the Pittsburgh area and had to pass through the same locks and dam Nos. 7, 8 and 9, which will be replaced by the New Cumberland dam and locks. According to the official records of the Corps of Engineers, 875 such vessels constructed for war purposes moved over the Ohio River for New Orleans and beyond between January 1, 1942, and December 31, 1945; they consisted of auxiliary net tenders, destroyer escorts, PC boats, barges, landing craft (tank), LST's, mine planters and sweepers, tugs and lighters, and also 43,744 net tons of steel ship sections—mostly from the Pittsburgh area—for further assembly. The movement of these vessels and materials demonstrated the essentiality of the Ohio River to the war effort.

Now that uranium diffusion plants of the Atomic Energy Commission are being located in the Ohio Valley and will be dependent to a very considerable extent on electric power produced from coal transported by barges on the Ohio River, that river becomes increasingly important to the national defense. As an example, for servicing the Atomic Energy Commission's uranium diffusion center near Portsmouth, Ohio, the power plants at Madison, Ind., and Cheshire, Ohio, will require at least 7 million tons of coal per year of which more than one-half will be received by barges operating on the Ohio River. During a time of war, it is expected that this coal tonnage will be materially increased.

That an appreciably increased use of the Ohio River for commerce has been occurring over the years is evidenced by the large and substantial growth of its traffic. The official statistics of the Corps of Engineers show the Ohio River traffic amounted to:

Year	Net tons	Ton-miles
1919	5,004,377	604,750,654
1929 [1]	21,955,148	1,512,584,740
1951 [2]	56,540,863	9,760,268,000

[1] Canalization as a 9-foot channel was completed.
[2] Latest year for which complete statistics are available.

Thus, in a period of 32 years, the traffic on the Ohio River increased 1,030 percent in tonnage and 1,514 percent in ton-miles. Since 1929, the tonnage on the Ohio River increased 2½ times while the ton-miles have jumped 6½ times. This amply demonstrates that improvement and modernization of a waterway enhances its utilization and stimulates the growth of traffic, with a corresponding wider dissemination of the economic benefits from the transportation performed thereon.

A valuable index of the extensive use made of the Ohio River by shippers and industries is the variety of commodities transported thereon, which include:

Grain	Sulfur	Industrial chemicals
Grain products	Sand and gravel	Fertilizer
Sugar	Iron and steel articles	Fertilizer materials
Bituminous coal	Machinery	Stone
Coke	Automobiles	Fluorspar
Petroleum	Motor trucks	Wooden railroad ties
Petroleum products	Coal-tar products	Other miscellaneous items
Cement	Sulfuric acid	

Exclusive of sand and gravel—which usually is short-haul traffic—bituminous coal, petroleum and petroleum products, and iron and steel articles account for 77 percent of the total traffic. These are heavy loading bulk commodities which are shipped in heavy volume and require large tows for their economical, efficient and continuous movement.

As has been pointed out herein, it is readily apparent that the Ohio River is a highly important artery of commerce and a valuable adjunct to the national defense, therefore, it requires the most efficient and modern navigation appurtenances and structures, such as the proposed locks and dam at New Cumberland, W. Va.

The importance of the stretch of the Ohio River from lock and dam No. 7 to lock and dam No. 9 as a traffic segment is substantiated by the presentation of certain traffic statistics pertaining thereto, which were prepared from data supplied by the Corps of Engineers. The following tabulation shows the net tons of traffic that moved through locks and dams Nos. 7, 8, and 9, and the average tonnage for the 3 structures during the calendar years 1947 through 1952:

Year	Net tons (2,000 pounds) of traffic			
	Lock and dam No. 7	Lock and dam No. 8	Lock and dam No. 9	Average
1947	7,710,000	5,579,000	5,607,000	6,298,667
1948	8,391,000	7,187,000	6,225,000	7,267,667
1949	8,589,000	6,704,000	6,134,000	7,142,333
1950	11,877,000	10,249,000	8,938,000	10,354,667
1951	12,338,000	10,971,000	9,315,000	10,874,667
1952	11,928,000	10,558,000	8,632,000	10,372,667

It is apparent that the tonnage handled at each lock and dam closely approximates that at each of the other locks and dams, indicating that most of the traffic transiting them is through traffic over the stretch of river involved.

There follows a statement, based on the preceding tabulation, comparing the average traffic of the 3 locks and dam Nos. 7, 8, and 9 with the total traffic of the Ohio River (Pittsburgh to Cairo) for the calendar years 1947 through 1952, and indicating the percentage the former is of the latter:

Year	Total traffic, Ohio River, Pittsburgh to Cairo (net tons)	Average traffic—3 locks	
		Net tons	Percent of Ohio River total
1947	41,396,738	6,298,667	15.2
1948	42,792,487	7,267,667	17.0
1949	41,300,455	7,142,333	17.3
1950	48,597,810	10,354,667	21.3
1951	56,540,863	10,874,667	19.2
1952	[1]	10,372,667	

[1] Figures for entire Ohio River not yet available for 1952.

It will be noted that the portion of the total Ohio River traffic moving over the stretch between locks and dam Nos. 7 and 9, during the calendar years 1947 through 1951, ranged from:

15.2 percent 1947
21.3 percent 1950
19.2 percent 1951

Using the average traffic of the 3 locks and dams for 1952 of 10,372,667 net tons and the distance of 20 miles between locks and dam Nos. 7 and 9, the traffic density for that stretch of the Ohio River during 1952 was at the rate of 518,633 net tons per mile. It is evident that the stretch referred to handles a substantial portion of the total annual traffic on the Ohio River.

Where such a heavy tonnage is involved, its movement should be facilitated to the greatest possible extent to effect the most favorable and efficient transportation operations. The construction of the proposed new locks and dam at New Cumberland, W. Va.—which would eliminate the present old locks and dam Nos. 7, 8, and 9—would be a potent factor in accomplishing this.

Obviously one of the primary considerations in justifying the proposed construction of the New Cumberland locks and dam would be the number of lockages of towboats and barges that would be eliminated or saved, as compared with those on the present three locks and dams. Through the cooperation of the United States District Engineer Office at Pittsburgh, Pa., this association has developed the following statistics of the number of single- and double-lockage tows locked through locks and dam Nos. 7, 8, and 9 during the calendar years 1947 through 1952:

LOCK AND DAM NO. 7

Year	Number of tows		
	Single lockages	Double lockages	Third lockages
1947	3,332	64	3,396
1948	3,319	106	3,425
1949	2,674	156	2,830
1950	3,398	224	3,622
1951	2,895	195	3,090
1952	3,152	276	3,428

LOCK AND DAM NO. 8

1947	1,898	85	1,983
1948	2,159	137	2,296
1949	1,805	215	2,020
1950	2,266	225	2,491
1951	2,626	214	2,840
1952	2,935	278	3,213

LOCK AND DAM NO. 9

1947	1,768	82	1,850
1948	1,832	136	1,968
1949	1,382	213	1,595
1950	1,740	243	1,983
1951	1,728	190	1,918
1952	1,804	284	2,088

GRAND TOTAL, 3 LOCKS AND DAMS

1947	6,998	231	7,229
1948	7,310	379	7,689
1949	5,861	584	6,445
1950	7,404	692	8,096
1951	7,249	599	7,848
1952	7,891	838	8,729

Only a quick glance at the large number of locked tows in the preceding table is necessary to observe that a considerable saving in lockages will be attained by the elimination of the single 600-foot locks, Nos. 7, 8, and 9, through the construction of the proposed New Cumberland locks. For example, in 1952 there were transited through the 3 existing single locks, 7,891 single-lockage tows and 838 double-lockage tows—a total of 8,729 tows. The 838 double-lockage tows, because of each locking through twice, actually accounted for 1,676 separate lockages which, added to the 7,891 single lockages, totals 9,567 actual lockages in 1952.

Had the New Cumberland structure been in operation in 1952, replacing the 3 existing locks, it would have saved at least two-thirds of the total lockages, or 6,378 lockages considering only the 600-foot lock, and an additional 280 lockages for the reason that its 1,200-foot lock would have required only 1 lockage—instead of 2—for the double-lockage tows that would have transited the 600-foot lock.

Construction of the proposed locks and dam at New Cumberland, W. Va., is amply justified by the condition of the old locks and dams Nos. 7, 8, and 9, which it will replace, and by the present river commerce affected, which has been steadily increasing year by year. Locks and dams Nos. 7 and 9 were completed in 1914 and No. 8 in 1911, their average age being more than 40 years; therefore they are well along in their useful expectancy.

The obsolescence of locks and dams Nos. 7, 8, and 9 is emphasized by the increasing deterioration that is prevalent. From an operating point of view the locks are in a deplorable condition. For example, at lock and dam No. 7 it is understood that the landward lock wall has been moving toward the river; in fact up to the present time the entire 600-foot length of the wall has shifted almost 6 inches, thus throwing it almost 4 inches out of plumb. In addition the concrete of the guide and lock walls is pitted and crumbling. There certainly would be no economy in retaining such structures in use.

As previously mentioned, it is a well-known fact that for a number of years there has been a very appreciable increase in the location of industries along the Ohio River, due to the availability of economical water transportation. This has meant, and will mean in the immediate future, a steady increase in Ohio River traffic and a heavy demand for transportation by barge. The large volumes of coal, petroleum and petroleum products, iron and steel articles, and other commodities transported on this waterway are vitally necessary for the maintenance of industries and public utilities as well as for the welfare of the populace in the many important cities and towns along its banks; they exemplify the great reliance placed in transportation by water.

There is always the possibility of a major lock failure at any one of the three locks and dams, Nos. 7, 8, and 9, because of their age, long use, and deterioration. Bearing in mind what has been said in the preceding paragraph, such a failure could have very dire consequences. Inasmuch as each structure has only one lock, it might well mean: Cessation of water-freight services on the Ohio River for long periods of time; serious disruption of commerce and industry in the area; and severe financial losses to water carriers and operators and to the general public, shippers, and others depending upon water transportation. Much suffering could also result if the failure came at a time when fuel supplies were low and rigorous weather prevailed; the impact of such a situation would be quite disastrous.

It is pertinent to consider more specifically the probable results of a major failure of any 1 of the 3 locks and dams, Nos. 7, 8, and 9, located between Midland City, Pa., and New Cumberland, W. Va.—a distance of 20 miles. All of the coal and other raw material for the steel industry, which move from the mines and other sources of supply above and around Pittsburgh to the important steel producing areas on the Ohio River in West Virginia and Ohio, must pass through these locks and dams. This is also true of important finished products manufactured in the Pittsburgh area, of fuel oil and other operating supplies moving northward to such area, and of other commodities transported in both directions. Three major steel-producing companies have plants in this section, and one large power plant is wholly dependent upon barge coal moving through the three locks and dams. The United States Air Force has fuel-storage facilities below the Montgomery locks, which receive supplies via the Ohio River through the same three locks and dams. If river shipments were stopped for any appreciable period, other methods of transportation could not adequately take care of the unusually large tonnage requirements of the steel producers.

It is obvious that the three locks and dams are the keys to navigation in the area where they are situated, and any cessation of service through them would stifle commerce and production in one of the important industrial centers in the United States. The proposed locks and dam at New Cumberland, W. Va., would effectively preclude the occurrence of such adverse conditions.

A single structure at New Cumberland, W. Va., to replace locks and dams Nos. 7, 8, and 9, would substantially reduce the Federal expenditures for maintenance, operation, and care. To remove the present hazardous conditions at the 3 existing locks and dams would require interim expenditures of around $17 million. Such repairs, however, would not delay for very long the necessity for replacing the repaired facilities, and in the meanwhile transportation must contend not only with obsolete navigation appurtenances but also with costly delays from repair work in progress. To spend $17 million to provide facilities which, because of their inadequacy, would not be built today could be nothing more than wasteful to the Government.

There are other considerations of the utmost importance in connection with the need for a new structure at New Cumberland, W. Va. During the past decade there has been a very marked trend toward larger floating equipment on the Mississippi River system, including the Ohio River. This has resulted from the increased efficiency of towing vessels with the development of diesel marine engines and from the competitive demands for reduced transportation costs to shippers, despite the rising costs of operations to water carriers and operators. Tows of 1,000 feet or over in length are very much in evidence on the inland rivers, including the Ohio, and will become more prevalent in the immediate future.

The locks and dam proposed for construction at New Cumberland, W. Va., include a modern 1,200-foot lock chamber that will enable the locking of the largest tows without breaking them up, as is now required by the 600-foot chambers in the locks to be replaced, which is an expensive and delaying pro-

cedure. Savings occurring from large single lockages of tows, as versus a number of double or greater lockages, are generally reflected in transportation charges to shippers and receivers of inland waterway transportation. Furthermore, single lockages obviate congestion at the locks and reduce transportation time, it being readily apparent that a single lockage of a 1,000-foot tow needs much less time than two lockages through a 600-foot lock. Thus, a 1,200-foot lock will materially contribute to the efficiency of navigation and the economy of water-transportation operations, which are reflected in water freight rates.

To replace locks and dam Nos. 7, 8, and 9 by a single modern structure at New Cumberland, W. Va., would be more economical and efficient from the standpoint of Federal expenditures than to replace them individually. The cost of the proposed locks and dam certainly would be quickly compensated for by lower costs of maintenance, operation, and care through fewer individual lockages as compared with the existing three old locks and dams.

The American Waterways Operators, Inc., believes that the proposed construction of a high-level navigable dam on the Ohio River, 56.7 miles below Pittsburgh, Pa., at New Cumberland, W. Va., with twin locks—one of 600 feet by 110 feet, and one of 1,200 feet by 110 feet—to replace the existing locks and dam Nos. 7, 8, 9, is economically justified because such a modern structure will:

1. Provide more modern and efficient navigation facilities for an important and steadily increasing traffic and enable the greater utilization of the Ohio River as an artery of commerce in the future;

2. Remove the ever-present threat of a complete disruption and forced cessation of water-freight services for long periods of time on account of a major failure of any one of the present single-lock facilities which are proposed to be replaced;

3. Enhance the value of the Ohio River for national-defense purposes, particularly with respect to the movement of strategic commodities such as fuels, chemicals, food, and atomic energy materials and supplies, and to the movement of oceangoing vessels built at Ohio River shipyards for war purposes and moved to tidewater at New Orleans;

4. Result in more efficient and faster inland waterway service with reduced operating costs to water carriers and operators, which will be reflected in lower transportation charges to shippers and other users of water transportation and, in turn, will attract more industries and traffic to the area served by the Ohio River; and

5. Eliminate the necessity for the Federal Government to incur wasteful and uneconomic expenditures for the operation, maintenance, and care of lock and dam facilities that have practically reached the end of their useful life.

It is respectfully urged, therefore, that funds be included in the appropriations for the fiscal year 1954 to enable the Corps of Engineers to immediately undertake the construction of this much needed navigation improvement.

Senator YOUNG. Senator Kilgore, I understand you have some witnesses here from West Virginia who would like to make statements.

Senator KILGORE. Yes, Mr. Chairman.

STATEMENT OF HON. HARLEY M. KILGORE, A UNITED STATES SENATOR FROM THE STATE OF WEST VIRGINIA

GENERAL STATEMENT

Senator KILGORE. I am fully conversant with this Wheeling-Benwood flood-wall situation, and the witnesses we have here are people eminently qualified to tell this committee the needs of the situation, the actual real loss to the Federal Government and the questions of defense. I am not going to take up the committee's time now by putting a statement of mine in the record, because I am going to make it in the committee later. I would like to ask my colleague, Senator Neely, to introduce the witnesses and make such statement as he cares to, and get the testimony in as rapidly as we can.

Senator YOUNG. Senator Neely?

STATEMENT OF HON. MATTHEW M. NEELY, A UNITED STATES SENATOR FROM THE STATE OF WEST VIRGINIA

GENERAL STATEMENT

Senator YOUNG. Senator Neely, it is a pleasure to have you appear before the committee.

Senator NEELY. Mr. Chairman, I sincerely thank you. There are a number of witnesses who have come here from West Virginia to testify in behalf of an appropriation with which to continue the work on the Wheeling flood wall. There was an item in the budget of the last administration for $1,400,000 to continue the work during the next year. That item does not appear in the revised budget estimate submitted by the present administration.

REQUEST FOR FUNDS

The purpose of our appearance this morning is to try to prevail upon the committee to reinstate the $1,400,000 item and approve an appropriation with which to continue this important work. The pressing necessity for the flood wall will be clearly and we believe impressingly, stated by distinguished witnesses.

I ask leave to introduce Mr. Earl Runner, who is the efficient chairman of the Flood Wall Authority of Wheeling.

Mr. Runner, please come forward and proceed in your own way?

WHEELING PLANNING COMMISSION AND WHEELING FLOOD WALL AUTHORITY

STATEMENT OF EARL I. RUNNER, CHAIRMAN

WHEELING FLOOD WALL PROJECT

Mr. RUNNER. Mr. Chairman, my name is Earl I. Runner. I am now and have been in the retail drug business in the city of Wheeling since 1901. I am chairman of the Wheeling Planning Commission and also chairman of the Wheeling Flood Wall Authority and I have been interested in securing flood protection for Wheeling and Benwood since 1937.

The United States Corps of Engineers of the Pittsburgh district have completed plans for flood protection for these two cities and are now in a position to negotiate construction contracts as soon as money for the project is available.

The cities of Wheeling and Benwood have complied with all the required assurances of the Federal Government and both cities have appointed authorities to complete each city's obligation for their share of the flood-protection program.

Both of these authorities have engaged the services of a firm of consulting engineers. Both authorities are also prepared to make similar contracts with a firm of financial advisers.

The substantiating evidence in support of the foregoing statements are contained in this brief "Wheeling-Benwood flood-protection project, 1937 to 1953," which I now offer as evidence.

Senator YOUNG. That will be placed into the record.

(The data referred to follows:)

HISTORY AND DETAILS OF THE WHEELING-BENWOOD FLOOD-PROTECTION PROJECT, 1937 TO 1953

The condensed information and data enclosed in this exhibit is intended to acquaint our Senators, our Congressmen, and all members of the Senate and House subcommittees with the endeavors of Wheeling and Benwood to secure flood protection. These congressional committees will decide on Wheeling-Benwood's application of $1,400,000 for construction funds as recommended by the United States Corps of Engineers and as contained in past President Truman's budget for fiscal 1954.

Exhibit 1 describes the initial application and procedure taken by Wheeling in 1937 shortly after the approval on June 22, 1936, of the Flood Control Act (sec. 3, 49 Stat. 1571) by the United States Congress, also all applications and proceedings to date.

Exhibit 2 gives the data on flood stages in Wheeling between 1873 to January 1952. These records are taken from the United States Corps of Engineers' records and are based on the flood stage at Warwood Dam No. 12. The crest in Wheeling would be somewhat higher.

Exhibit 3 is a compilation of the actual damage and cost involved in combating the floods in Wheeling between 1873 and April 1948. The 43.7-foot flood of December 5, 1950, and the 44-foot flood of January 1952 are not included in these records.

Exhibit 4 pertains to the reasons why Wheeling has not only failed to secure new industries and residence within its corporate boundaries but has actually lost industry and failed to gain in population.

Exhibit 5 is an itemized report of the Wheeling Steel Corp. between the periods of March 1936 and January 1952 showing the loss of steel tonnage which is vital.

WHEELING PLANNING COMMISSION.
WHEELING FLOOD WALL AUTHORITY.

EXHIBIT 1

1937: Under the 1936 Flood Control Act Wheeling made application for and was granted planning funds for the construction of a flood wall and a sample wall was constructed on Water Street at 12th, Wheeling. The project, however, was delayed due to the divided local opinion and to the limited scope of the protection which did not, at that time, include South Wheeling and Benwood.

1937–48: After the war the project was revived and on February 12, 1948, Col. Frank H. Faulkner, district engineer, Pittsburgh, Pa., held a hearing in Wheeling. After establishing the fact that both Wheeling and Benwood were united in a desire for flood protection and that the project was economically justified, application for planning funds was made and granted for Wheeling-Benwood flood-protection project.

1948–52: During these years additional funds for planning were approved by Congress so that early in 1952 planning had progressed to the point where Wheeling and Benwood were justified and in a position to request construction funds for the project.

On May 22, 1952, the cities of Wheeling and Benwood made application to the Senate subcommittee for construction funds for Wheeling-Benwood project. The Senate subcommittee approved an appropriation of $1,500,000. The Senate, as a whole, later approved the appropriation of $1,500,000, but in the final days before passage Wheeling and Benwood's appropriation, along with other similar appropriations, was stricken from the final budget.

Wheeling and Benwood have complied with all the legal assurances required under the act of 1936 as follows: Wheeling City Council, by ordinance dated March 19, 1952; Benwood City Council, by ordinance dated April 28, 1952.

Each city has, by ordinance and in accord with the State laws of West Virginia (see 1949 W. Va. Code, sec. 510; 1935, sec. 38; 1945, sec. 90) authorized a flood-wall authority to be appointed, which was unanimously approved as follows: Wheeling City Council, by ordinance dated December 16, 1952; Benwood City Council, by ordinance dated December 19, 1952.[1]

[1] Each city must appoint their respective authorities, as Wheeling is in Ohio County and Benwood is in Marshall County.

After completion of the flood wall a joint authority will be formed for maintenance and operation.

Appointed and approved by Wheeling Council on December 16, 1952, to serve as the flood wall authority were the following citizens of Wheeling:

Hon. Charles J. Schuck, mayor of city of Wheeling
Robert L. Plummer, city manager
W. W. Holloway, chairman of the board of the Wheeling Steel Corp.
Austin V. Wood, publisher, Wheeling News and Intelligencer
Robert Lee Boyd, vice president, Bloch Bros. Tobacco Co.
Earl I. Runner, president, C. H. Griest Co., Wheeling

On December 19, 1952, Benwood City Council approved these citizens from their community, namely:

Raphael P. Deegan, mayor, city of Benwood
Al Kresco, member city of Benwood Council
Paul W. Koenemund, Wheeling Steel Corp.
George W. Hansen, Wheeling Steel Corp.

On January 27, 1953, the Wheeling City Council approved the advance of $10,000 cash for the use of the Wheeling Flood Wall Authority in securing the services of a civil engineer and a financial adviser.

Meeting in official capacity on January 23, 1953, the Wheeling Flood Wall Authority contracted for the services of W. O. McCluskey, Jr., a registered and consultant engineer, to immediately determine and prepare to execute Wheeling's legal obligations in the securing of the necessary rights-of-way, relocations, alterations, and similar problems.

During the past month the extent of Wheeling's obligations of this type have been determined by this engineer and his organization, so that the Wheeling Flood Wall Authority is now in a position to complete these obligations on short notice.

The same is true of the financing program as the entire flooded area has been classified and surveyed to determine the properties liable for flood protection assessment. There, again, the Wheeling Flood Wall Authority is in a position to complete the financing of Wheeling's obligations on short notice.

The city of Benwood is also in a position to complete their obligations far in advance of the final appropriations of funds for the construction of Benwood's section of the proposed flood protection.

On January 16, 1953, Col. Ralph A. Lincoln, district engineer, Pittsburgh, Pa., accepted, in the name of the United States Government, the assurances of the city of Wheeling.

On January 22, 1953, the city of Benwood's assurances were also accepted by the district engineer in the name of the United States Government.

West Virginia is a member of an eight-State pact to abolish stream pollution. The city of Wheeling is planning a sewerage disposal system in compliance with this pact and have authorized and appointed a sewerage disposal authority. Start of the actual construction of the project is contemplated before July 1, 1953. During the past 2 years a complete engineering survey of the physical problems of the project have been completed and a city ordinance authorizing the financing of the project is just about ready for adoption.

The sewerage disposal project ties in very closely with the flood-protection project and it is the united opinion of the United States Corps of Engineers as well as the sewerage disposal engineers that, provided planning and construction were simultaneous, it would result in a saving of about $750,000, of which one-half would go to the Corps of Engineers for the flood wall project and the other half would go to the city of Wheeling for the sewerage disposal project.

It is the united opinion of the Wheeling and Benwood councils, their respective officials and the flood wall authorities of both cities that both of these communities have, to this date, complied with all legal obligations required of them under the Flood Wall Act of 1936 and, in addition, have established beyond all doubt their ability to complete any final or remaining obligations.

EXHIBIT 2

Flood stage in Wheeling is 36.0 feet at dam 12, gage period of record 1873 to date

Flood:	Crest at Wheeling
Dec. 14, 1873	38.8
Jan. 8, 1874	38.8
Dec. 11, 1878	34.9
Feb. 11, 1881	38.8
June 10, 1881	40.9
Feb. 5, 1883	39.7
Feb. 7, 1884	53.4
Feb. 18, 1891	44.6
Jan. 8, 1895	36.0
Feb. 24, 1897	48.8
Mar. 24, 1898	44.6
Apr. 21, 1901	41.8
Mar. 1, 1902	43.4
Mar. 1, 1903	40.1
Jan. 23, 1904	44.2
Mar. 4, 1904	39.2
Mar. 8, 1904	36.3
Mar. 12, 1905	42.9
Jan. 20, 1907	37.0
Mar. 15, 1907	50.1
Feb. 16, 1908	42.8
Mar. 20, 1908	39.6
Mar. 3, 1910	37.5
Jan. 16, 1911	36.3
Jan. 31, 1911	35.2
Mar. 22, 1912	38.6
Jan. 9, 1913	44.6
Jan. 12, 1913	39.4
Mar. 28, 1913	51.1
Feb. 3, 1915	42.2
Feb. 11, 1918	39.4
Feb. 21, 1918	38.7
Mar. 16, 1918	38.0
Mar. 14, 1920	38.4
Nov. 30, 1921	36.3
Jan. 5, 1924	37.3
Mar. 31, 1924	41.7
May 14, 1924	38.1
Jan. 23, 1927	42.5
Dec. 15, 1927	41.9
Mar. 16, 1933	42.4
Mar. 19, 1936	55.2
Mar. 26, 1936	39.6
Jan. 23, 1937	46.2
Jan. 26, 1937	48.7
Apr. 28, 1937	45.9
Dec. 19, 1937	37.4
Apr. 1, 1940	38.0
Apr. 21, 1940	42.6
Dec. 31, 1942	51.3
Feb. 28, 1945	37.2
Mar. 4, 1945	36.6
Mar. 7, 1945	47.3
Apr. 15, 1948	44.2
Dec. 5, 1950	40.7
Jan. 28, 1952	44.0

NOTE.—Above data taken from the records of the U. S. Corps of Engineers, Pittsburgh district.

EXHIBIT 3

Flood stage is 36.0 feet on gages, period of record 1873 to date

Flood	Crest at Wheeling	Direct flood damages	Flood	Crest at Wheeling	Direct flood damages
Dec. [illegible], 1873	38.8	$1,029,000	Feb. 3, 1915	42.2	$2,420,000
Jan. 8, 1874	38.8	954,000	Feb. 11, 1918	39.4	
Dec. 11, 1878	34.9	48,000	Feb. 21, 1918	38.7	1,611,000
Feb. 11, 1881	38.8	1,412,000	Mar. 16, 1918	38.0	
June 10, 1881	40.9	1,784,000	Mar. 14, 1920	38.4	565,000
Feb. 5, 1883	39.7	1,280,000	Nov. 30, 1921	36.3	77,000
Feb. 7, 1884	53.4	9,015,000	Jan. 5, 1924	37.3	
Feb. 18, 1891	44.6	3,789,000	Mar. 31, 1924	41.7	1,736,000
Jan. 8, 1895	36.0	201,000	May 14, 1924	38.1	
Feb. 24, 1897	38.8	954,000	Jan. 23, 1927	42.5	2,118,000
Mar. 24, 1898	44.6	3,789,000	Dec. 15, 1927	41.9	1,836,000
Apr. 21, 1901	41.8	2,136,000	Mar. 16, 1933	42.4	2,030,000
Mar. 1, 1902	43.3	2,980,000	Mar. 19, 1936	55.2	10,378,000
Mar. 1, 1903	40.2	1,488,000	Mar. 26, 1936	39.6	
Jan. 23, 1904	44.2		Jan. 23, 1937	46.2	
Mar. 4, 1904	39.2	3,509,000	Jan. 26, 1937	48.7	6,345,000
Mar. 8, 1904	37.3		Apr. 28, 1937	45.9	
Mar. 12, 1905	42.9	2,754,000	Dec. 19, 1937	37.4	2,125,000
Jan. 20, 1907	37.0	7,955,000	Apr. 1, 1940	38.0	427,000
Mar. 15, 1907	50.1		Apr. 21, 1940	42.6	2,152,000
Feb. 16, 1908	42.8	2,693,000	Dec. 31, 1942	51.3	8,363,000
Mar. 20, 1908	39.6		Feb. 28, 1945	37.2	4,918,000
Mar. 3, 1910	37.5	565,000	Mar. 4, 1945	36.6	
Jan. 16, 1911	36.3	279,000	Mar. 7, 1945	47.3	
Jan. 31, 1911	35.2		Apr. 15, 1948	44.2	2,980,000
Mar. 22, 1912	38.6	935,000			108,318,000
Jan. 9, 1913	45.4				
Jan. 12, 1913	39.4	8,688,000			
Mar. 28, 1913	51.1				

NOTE.—The above damages are based on November 1951 values. Today's values would be higher.

December 1950 and January 1952 damages not included in above total: Dec. 5, 1950, 43.7; Jan. 28, 1952, 44.0. The figures do not include the damage and costs sustained by the city of Benwood. These figures prove, beyond all doubt, that flood-protection expenditures for the Wheeling-Benwood area are economically justified.

EXHIBIT 4

1. The cities of Wheeling and Benwood are situated on a long, narrow strip of ground between rugged hills or small rugged mountains and the Ohio River. Our five streets namely: Water, Main, Market, Chapline, and parts of Eoff Street are fairly level. Many homes are built on the hills but industry cannot operate on rugged hillsides.

2. In 1920, the W. C. Knowles Co., city planning engineers of Pittsburgh surveyed Wheeling and made recommendations for changes and improvements. One of these major plans was a flood wall to protect the Wheeling-Benwood area. At that time the population of Wheeling was approximately 40,000 people and a slogan adopted by our community was "140,000 population by 1940."

3. In 1920 Wheeling's population was 40,000 in Wheeling proper. In 1921 Wheeling's suburbs were taken into the city making a grand total of 57,872 at that time. Today, the population of Greater Wheeling is 58,891.

In comparison with floodwall protection, Parkersburg, W. Va., has grown, during these corresponding periods, from 17,842 to 29,684. Huntington, W. Va. has grown from 31,161 to 86,353.

4. Wheeling's failure to grow in population has been due almost wholly to the withdrawal of industrial plants and other businesses from our floodridden areas in south Wheeling and in Benwood and the reluctance of any new industry to build a plant and start operations in a territory where they would be subject to the damage of periodical floods.

5. Wheeling also had three floods during the month of March 1936. The March 19 flood reached a height of 55.2 feet. The highest flood in our history. Projected on today's values a loss inflicted on our community would exceed $12 million for this one flood alone.

6. The January 26, 1937 flood reached the height of 48.7 feet and again because of the rapidity with which it came up, together with the cold weather prevailing, caused a vast amount of damage as well as a vast amount of suffering from exposure and dislocation among our people.

7. The December 1942 flood reached a height of 51.5 feet with damage estimated at $8,500,000, but again the weather was cold thereby causing much sickness due to exposure.

EXHIBIT 5

FLOOD EFFECT ON BENWOOD STEEL PLANT, MAY 22, 1952

The Benwood plant of the Wheeling Steel Corp. is located in an area that will be protected from floods by the proposed new flood wall for Wheeling and Benwood, W. Va. This plant is a completely integrated steel-producing operation consisting of 1 blast furnace for the production of pig iron, 2 Bessemer converters for the production of steel, and the necessary rolling and finishing facilities required for converting the steel produced into pipe. The steel ingot production of this plant in 1951 was 390,259 tons, and there are 2,566 men employed in this plant.

Listed below are the more serious floods that have occurred since January 1, 1936, the length of time that steel production was interrupted, and the loss in steel production and man hours.

Date	Idle time in hours	Production loss in ingot-tons	Man-hours lost
Jan. 29, 1952	24	1,200	26,063
Dec. 5, 1950	30	1,480	16,260
Apr. 15, 1948	52	2,350	30,623
Mar. 8, 1945	104	4,700	60,223
Dec. 31, 1942	83	4,002	66,035
Apr. 28, 1937	104	4,430	84,832
Jan. 23, 1937	272	11,300	238,497
Mar. 19, 1936	240	9,550	207,121
Total	909	39,012	729,654

Future floods, if protection is not provided, will result in greater losses than those shown above because of the increased production capacity that has been completed in recent years. Also, an additional project is under way which will make possible the processing of an additional 60,000 tons of steel ingots per year. This project is covered by certificate of necessity No. TA–12079 for $1,410,000, which has been issued by the Defense Production Administration, and the materials required by this project have been allocated by the National Production Authority.

WHEELING STEEL CORP.,
M. D. AYERS, *Chief Engineer.*

SUPPLEMENTAL EXHIBIT

Federal cost of project

The United States Corps of Engineers estimates on the Federal cost of the Wheeling-Benwood project is approximately $18 million.

Local participation

The United States Corps of Engineers estimate that Wheeling's cost for rights-of-way, engineering, relocations, alterations will be approximately $3,200,000.

The United States Corps of Engineers estimate that Benwood's cost for rights-of-way, engineering, relocations, alterations will be approximately $2,250,000.

The total cost of local participation for Wheeling and Benwood totals approximately $5,540,000, which equals about 25 percent of the total cost of the project.

Re Federal, State, and local taxes

At present the lowlands and wastelands in Wheeling and Benwood, affected by floods, are extremely low in assessed value and productiveness as manufacturers and industry will not locate their plants in flood-ridden areas and, therefore, these areas bring to the taxing bodies very low amount of tax money.

However, these same lowlands and wastelands are ideal for many types of manufacturing and industry who would undoubtedly soon occupy these flooded areas after flood protection was assured which would undoubtedly result in a vast increase in tax money to the United States Government, the State of West Virginia, and to the cities of Wheeling and Benwood.

Federal expenditures for planning

The district engineers, Pittsburgh, Pa., reports that a total of $259,000 has been allocated for planning on the Wheeling-Benwood flood protection project through fiscal 1938 to 1953, inclusive. Practically all of this planning money has been spent as follows:

1938 (Wheeling only)	$6,000
1946 (South Wheeling)	5,000
1947 (Wheeling and Benwood)	14,500
1948 (Wheeling and Benwood)	8,500
1949 (Wheeling and Benwood)	25,000
1950 (Wheeling and Benwood)	75,000
1951 (Wheeling and Benwood)	100,000
1953 (Wheeling and Benwood)	25,000

STATEMENT OF EARL I. RUNNER

My name is Earl I. Runner. I am now and have been, since 1901, in the retail drug business in the city of Wheeling, W. Va.

I am chairman of the Wheeling Planning Commission and also chairman of the Wheeling Floodwall Authority, and I have been interested in securing flood protection for Wheeling and Benwood since 1937.

The United States Corps of Engineers of the Pittsburgh district have completed plans for flood protection for these two cities and are now in a position to negotiate construction contracts as soon as money for the project is available.

The cities of Wheeling and Benwood have complied with all the required assurances of the Federal Government, and both cities have appointed authorities to complete each city's obligation for their share of the flood-protection program.

Both of these authorities have engaged the services of a firm of consulting engineers. Both authorities are also prepared to make similar contracts with a firm of financial advisers.

The substantiating evidence in support of the foregoing statements are contained in this brief, Wheeling-Benwood Flood Protection Project, 1937–53, which I now offer as evidence.

With me today are several members of these authorities.

From the Wheeling Floodwall Authority:

Hon. Charles J. Schuck, mayor of the city of Wheeling
Mr. Robert L. Plummer, city manager of Wheeling
Mr. Austin V. Wood, publisher of the Wheeling News-Register and Intelligencer and 12 other West Virginia dailies

From the Benwood Floodwall Authority:

Mr. Raphael P. Deegan, mayor of the city of Benwood
Mr. M. D. Ayres, chief engineer of the Wheeling Steel Corp.
Hon. Carl G. Bachman, former Congressman from our district
Hon. Andrew C. Schiffler, former Congressman from our district
Mr. Robert R. Jewell, president, Ohio Valley Board of Trade
Mr. F. Leslie Body, secretary, Ohio Valley Board of Trade
Mr. Earl H. Ringler, president, Ohio Valley Trade and Labor Assembly, AFL, vice president, West Virginia Building and Construction Trade Council
Mr. Wilson E. Connelly, president, Wheeling, W. Va., Building and Construction Trades Council, AFL, of Wheeling and vicinity. Also secretary, West Virginia Building and Construction Trade Council

Any of these men are prepared to answer any questions that your committee may see fit to ask. However, before any questions are asked, I am going to ask Hon. Charles J. Schuck, mayor of the city of Wheeling, to formally present our request.

Mr. RUNNER. Thank you, Mr. Chairman.

ORIGINAL BUDGET

Senator YOUNG. Colonel Hiatt, what was the Corps of Engineers' request on this to the Bureau of the Budget?

Colonel HIATT. The Corps of Engineers' request to the Bureau of the Budget?

Senator YOUNG. Yes.

Colonel HIATT. I have that right here, sir. The sum of $1,473,600 within the original budget ceiling, sir. The approved budget, under the former administration, was $1,400,000. And there is nothing in the present budget before this committee.

Senator YOUNG. I raise that question because personally I have never paid too much attention to Budget Bureau figures. I think this committee knows about as much about the need for various projects as the Bureau of the Budget does.

Senator KILGORE. You made the statement that you were within the original budget ceiling, I believe, in your recommendation.

Colonel HIATT. Yes, Senator. We received a ceiling. We make our budgets up normally in July or August, within certain ceilings that are prescribed by the Bureau of the Budget. We submit our recommendations based on this ceiling amount. Our submission last July or August in that amount was the first figure I mentioned, $1,473,000.

Senator KILGORE. Did the budget approve that amount?

Colonel HIATT. $1,400,000 of it.

Senator KILGORE. Out of $1,473,000?

Colonel HIATT. I believe it was $1,473,000, sir.

Senator KILGORE. That was the amount you felt necessary for work in the fiscal year, was it not, Colonel?

Colonel HIATT. Yes, sir. $1,473,600.

Senator KILGORE. When did that contemplate the completion of the wall, do you remember, Colonel?

Colonel HIATT. Yes, sir. In fiscal year 1958, sir. It is about a 4-year construction period. It is quite an extensive project.

The city is going to have to participate and make some modification to their works. A cooperative project, the total cost being $19,500,000.

COMPLETED PLANNING

Senator KILGORE. Is the planning completed?

Colonel HIATT. The planning is sufficiently advanced that construction could be undertaken in fiscal year 1954. Yes, sir.

Senator KILGORE. And the amount was cut out in the later budget, is that right?

Colonel HIATT. Yes, sir.

Senator KILGORE. When the new Bureau of the Budget came in, that is when it was cut out?

Colonel HIATT. Yes, sir.

Senator KILGORE. The floodwall would really protect more than Wheeling, would it not? It would protect Wheeling and Benwood and all the communities in that area, in that steel manufacturing center, would it not?

Colonel HIATT. Yes, sir.

Senator KILGORE. The wall would flank at one end a big railroad, which gives some protection at one end and a bluff at the other, is that right?

Colonel HIATT. That is correct, sir.

Senator KILGORE. So you do not have to come back inland with end walls except at Wheeling Creek?

Colonel HIATT. In Wheeling Creek there are required floodwalls up to tie to high ground up that ravine there.

Senator NEELY. Does the recommendation of the Corps of Engineers favor the appropriation for this floodwall?

Colonel HIATT. Well, it is on the record before this committee, Senator. We would like to make certain that it is understood that we are here in support of the President's approved budget.

Senator NEELY. But the Corps of Engineers has not nullified the recommendation that it previously made, has it?

Senator KILGORE. You still believe that floodwall should be built?

Colonel HIATT. Yes, sir. The Congress has directed that it be built, Senator.

Senator KILGORE. As an engineering proposition, and as a manufacturing-defense proposition, you think the floodwall is meritorious and should be built?

Colonel HIATT. Yes, sir.

FLOOD DAMAGE

Senator NEELY. Could you tell the committee what the total flood damage in the Wheeling area has been since 1884?

Colonel HIATT. Yes, sir. We compute the average annual damages in order to justify, economically, the project. This project is economically justified. The major flood damages that have occurred back as far as 1884 in our records, Senator, in which there was a flood in February which, based on estimates on present conditions, would have caused almost $9.5 million worth of damages. The damages which would have resulted from 1907 flood were about $8 million; the 1913 flood, more than $9 million; the 1937 flood almost $6.7 million; the December 1942 flood almost $8.8 million; the 1945 flood, in March, more than $5 million; and the maximum flood of record, in 1936, if it should occur now, would cost almost $11 million worth of damage in this highly developed area.

TOTAL AMOUNT OF DAMAGES

Senator NEELY. Do you have the total amount of damages inflicted on that area by floods since 1884?

Colonel HIATT. Yes, sir. The major ones are listed here. The total I would have to furnish. I don't have that. I would have to furnish that for the record, sir. In general, the benefits expected from this project, of course, over the years, will average out to exceed the costs of it.

(The following information was furnished by the Corps of Engineers:)

Estimate of direct flood damages at Wheeling-Benwood in all floods to date since 1884, based on price levels and development as of July 1952 amounts to $108,610,000. Flood damages in the same area since January 9, 1913, under similar assumption amounts to $63,375,000.

Senator NEELY. What do you figure the total cost of the completion of the wall would be under present conditions?

FEDERAL COST

Colonel HIATT. The total Federal cost is estimated now, sir, at $19,550,000.

Senator HAYDEN. My recollection, Mr. Chairman, was that when we were getting this planning money a similar showing was made. It struck me then as really an appalling situation that a city located as it is and industrialized, particularly, in the way that is so helpful to the national defense, would be left helpless when it comes to this kind of flood protection. I can understand, of course, the Corps of Engineers is bound by a total budget. But, on a showing like this, it seems to me the committee would be justified in acting on its own.

Senator YOUNG. You will recall, Senator Hayden, that we in North Dakota got several projects started that did not have a budget estimate. This committee on several occasions allowed construction funds to start projects in my State that did not have budget estimates.

Senator HAYDEN. And the construction that has been undertaken has been actual, permanent, and beneficial to you. There is no doubt about it at all. The projects are all justified.

Senator YOUNG. Any further questions?

Senator NEELY. Mr. Chairman, was not the situation to which you referred one with which you were confronted when you were building the world's largest earth dam in North Dakota?

Senator YOUNG. That one happened to have a budget estimate. But the Jamestown Dam did not have a budget estimate; the Dickinson Dam did not have a budget estimate. We had a big transmission system under the Bureau of Reclamation that did not have a budget estimate, and several other ones.

Senator NEELY. We are glad, Mr. Chairman, that your experience has been such as to incline you to a generous degree of sympathy for our meritorious project.

Senator KILGORE. Mr. Chairman, may I ask the colonel one more question?

Senator YOUNG. Yes, sir.

Senator KILGORE. Colonel, in the figures you gave, would you separate those beginning with the flood of 1913 up to the present time? Would you give the total from the beginning of your records, and then the total from 1913? The reason for asking that question is that in 1913 income taxes were enacted and damages could be charged against taxes.

EFFECT OF FLOODS ON INDUSTRY

Another thing, Colonel, isn't it a fact that the industrial steelworks and practically all industries in the area are flooded?

Colonel HIATT. Yes, sir; that is correct.

Senator KILGORE. In other words, the productive business of the Wheeling-Benwood area is in the flooded area in case of high water?

Colonel HIATT. Yes, sir; that is correct.

Senator KILGORE. So, industry is shut down when you get a flood?

Colonel HIATT. Yes, sir. Not only the industries but the transportation lines, too, sir.

Senator HAYDEN. I wanted to inquire of the Senator from West Virginia: Do you mean to say that the Government has lost more money in income taxes since 1913 than it would cost to build this project?

Senator KILGORE. I am going to do a little figuring on that. I will submit the statistics, and I think they will show that.

(Senator Kilgore submitted the following:)

Mr. Chairman, at the recent meeting of this subcommittee, I offered to furnish a conservative estimate of Federal losses in the way of income tax caused by chargeoffs on flood loss in one of the many floods which have afflicted Wheeling and Benwood, W. Va.

I would like herewith to furnish the best estimates available which are based on the 1936 flood alone, and do not include income-tax losses for a loss of work-time by workers, income-tax losses by loss of jobs by merchants, and other small-business men, which in my opinion, would almost double the estimated figure of $7,200,000 shown in this tabulation, which I requested to be made in the most careful and conservative fashion.

PROJECTING THE 1936 FLOOD (55.6 FEET) AT 1953 VALUES IN WHEELING AND BENWOOD

A flood in 1953 similar to that in 1936 would create a loss in revenue to the Federal Government by reduction in taxes in excess of $7,200,000 at 1953 values. This loss is conservatively estimated as follows:

Individuals:	
Loss time and man-hours (1953 values)	$4,000,000
Damage to individual homes (1953 values)	7,500,000
Subtotal	11,500,000
Based on the individual-income-tax rate, it is estimated the Government loss in income taxes would be	2,500,000
Manufacturing:	
Damage to plant and equipment (1953 values)	7,500,000
Loss of profit in production (1953 values)	8,500,000
Subtotal	16,000,000
Based on the average corporation-income-tax rate, the estimated loss in income to the Government from loss of production profit alone would be	4,700,000
The total loss in Federal taxes from individuals and manufacturing would exceed	7,200,000

The above estimate of tax loss to the Federal Government does not include loss of taxes created by damage and loss of business for retailers, wholesalers, service establishments, utilities, transportation, hotels, theaters, and many other groups for which information is not available.

Senator HAYDEN. I would not doubt it at all.

Senator NEELY. Mr. Chairman, let me now present Mayor Charles Schuck, of Wheeling.

CITY OF WHEELING W. VA.

STATEMENT OF HON. CHARLES J. SCHUCK, MAYOR

GENERAL STATEMENT

Mr. SCHUCK. As indicated in the statement made by Senator Neely, I am the mayor of the city of Wheeling. As such I appear before you gentlemen in a résumé of some of the matters I said before the com-

mittee in the House the other day. As you gentlemen know, and as been recalled here, Wheeling is one of the largest industrial centers on the Ohio River between Pittsburgh and Cincinnati. In that section we have large steel mills, we have large industries, and we have those industries in places of work and employment that are seriously hampered from time to time by the rise of water during a flood period which we may have at almost any time of the year. It has been calculated, as has been said here in some last few years, that the loss has been in excess of $40 million. That is the loss, about, $49 million dating from 1884 to the present time. Taking all in all, going back as I think the history will show, to the year, probably, 1855 or 1858, the losses have almost doubled since that time. We are told, of course, that with the construction of the Conemaugh Dam, that the likelihood of floods in Wheeling will be lessened.

LESSENING OF FLOOD DAMAGE

That is to say, the Engineers have figured out that with the construction of these dams on the Allegheny River that there will be a lessening of 10 feet of flood damage at any time during a flood period. But the great difficulty, gentlemen, is that with reference to that particular matter, when we deduct the 10 feet from the crest of the flood that we have had there time and time again, we still have remaining 45 feet, which is perhaps 4 or 5 feet over and above the line that will bring about the inundation of the steel mills and still cause the same difficulty and the same problem that we have had heretofore.

EFFECT OF CLOSING OF STEEL MILLS

Not only that, gentlemen, but when you close down those steel mills you are at the same time closing off every avenue of communication so far as railroads are concerned, so far as trucking may be concerned, so far as being able to haul in and out those supplies that are producing by those steel mills in that particular section. So that, of itself, will not be a remedy to the situation. But in case the dikes are built, that the dam is built, then we have a situation whereby and through which we can take care of that situation so far as the steel plants are concerned.

In that particular I think it is well to notice that if, perchance, a flood would come up at a crucial period in our national history, if you will, or in our national events that may be happening, and that plant was shut down, there would be a very, very material loss, of course, in production, so far as steel is concerned that might be serious so far as our taking care of any emergency throughout that section is concerned. The only avenue of escape that we would have in these particular instances would be by reason of the dike or the dam that is to be constructed, and by reason of which fact we would be protected from further loss.

As I say, the loss has been in the figures of millions that have been incurred in the last 40 years. If this is continued, our industries will of course suffer most terribly.

In this particular industry, may I call your attention to the fact that if there was an emergency with our large steel plants at Wheeling, and there was a flood at the same time, there would be a complete isolation

of the situation which would prevent any communication or transportation of railroads or other facilities that might be used to advantage during a dry period. These inundations, even at 40 feet, or 42 or 44 feet, which is still lower than the estimate to be made after the 10 feet has been lopped off now by the new dams, it would still leave us in a position where it would be utterly impossible for us to carry on the work either in Wheeling or in Benwood by reason of these flood conditions. There is to my notion a very, very salient and important feature because of the fact of the manner in which it must be considered when we come to think of what might happen in the future. That is in the case of an emergency which we sincerely hope and trust will not come to pass.

NEW SEWAGE SYSTEM

In this connection also, we are at the present time in the city of Wheeling and in Benwood, getting ready to construct a new sewage system which is a must, under the decision of the United States Supreme Court, to prevent the further pollution of the Ohio River, and which will entail to the city of Wheeling alone a cost of between $5.5 million and $5.7 million.

You gentlemen will understand that is the prevention agreement that was entered into by the eight States signatory to the compact, and the United States Supreme Court has held that we must make these efforts now to cure the sewage system that prevails throughout the Ohio Valley.

In this construction, it has been estimated by the United States engineers that if the two projects can go together, that is if the project of our sewage system and the flood wall can go together, there would be a saving for both the Government and the city of Wheeling of between $600,000 and $700,000. In order that we better understand that, we will say to you that there are certain interceptor sewers which can parallel the dike that otherwise would not be in that situation or location, that they would have to be moved and consequently cost us more.

As Wheeling is a city of 60,000, we are endeavoring, of course, to save everything that we possibly can in this rather monumental amount that we are about to spend, because in connection with this very movement of the dike and the flood wall, we are likewise called upon to expend $2 million which must be raised by those who are to be benefited by the floodwall and who have heretofore been in the flooded district, the industries and homes and so on.

Insofar as this flood-wall proposition is concerned, there have been throughout the years some 6 or 7 appropriations by Congress.

LOCAL COOPERATION

At the present time, gentlemen, we are ready to proceed. We put the question to the engineers just about 6 months ago as to whether or not there was anything that Wheeling needed to do further in Benwood. We were informed that both of them had done everything, had answered all the commitments that were required of them, and they were now ready to proceed. I think that the engineer, the Colonel here, has confirmed that again this morning, that this matter is ready to begin construction, and notwithstanding the fact that heretofore the cost to the Government has been $259,000 which the Government

has paid throughout these appropriations in the past, we feel that the $1,400,000 is an absolute necessity for the purpose of carrying on the work in such a fashion and in such a way as to be satisfactory to all concerned, the Government as well, and that the Government will, in the final analysis, by the saving of the construction of this wall, save an infinite amount in loss and in damages and especially so in income tax. I have not figured it out, I don't know what that can be. But it can be readily ascertained, I believe, that when we come to a matter of calculating between 40 and 50 and 60 millions of dollars, it would mean considerable. We have completed every task that we have been called upon to perform as a city. We have done everything that the engineers have asked us to do. We have employed attorneys, we have had their work done, we have had the engineers who worked on it, and we have had the completion now, so far as we are concerned. We have done everything that the United States engineers have asked us to do with reference to both Benwood and Wheeling, and are ready to proceed as quickly as this appropriation would be allowed. I say to you the appropriation was allowed only after a survey had been made by the then President himself of the situation.

SURVEY BY PRESIDENT TRUMAN

At this time, President Truman made a survey of this whole situation during a flood period, just a year and a half ago. We feel that a return of this appropriation, or its use at the present time, is a matter of expediency rather than of mere economy. I applaud the efforts being made to divert due to economy. I have no objection to that at all—in fact, I am heartily in favor of it. But there comes a time, gentlemen, when a matter such as we have presented here is a matter of expediency to the people and a benefit to them as well as that which the Government will have in return. From the floods that we have had, I think in 1936 and 1937, 10, 12, or 15 people lost their lives and millions upon millions of dollars of property was destroyed. While I say that the savings from the dams that are being constructed at the present time would reduce by 10 feet the height of water that we would have at Wheeling, it puts us back, nevertheless, to 45 feet. I repeat that under the circumstances that would be no help to industry. It would be no help to thousands upon thousands of men who are employed in those industries, because of the loss of their wages that they would entail, and because of the further fact that the property itself would be so damaged.

I repeat most emphatically, if I possibly can, that in case of an emergency, the steel production of this valley in this particular section would be of such a volume that if its lack or loss were retarded in any way, it would be a most serious condition that would affect not only the Government, not only the people, but those who are the wage earners in that particular section, counted in the thousands.

LOSS IN TAXES

Senator NEELY. Mayor, before you retire, please let me ask you if you have any doubt that the loss in taxes to the State and Federal Government since 1884 exceeds all the present estimated cost of the construction of this flood wall?

Mr. SCHUCK. I don't think there is any question about it, Senator. Of course, we did not have the income tax back in 1884 or for some time after that. But even so, the loss that has been entailed there has been, on the part of the Government, in my judgment equal to the actual loss that has been suffered in man-hours and the physical property of those plants concerned.

Senator KILGORE. The engineers' estimates, of course, if based upon property damages, would not include the loss of earnings of men which would be reflected in income taxes?

Mr. SCHUCK. Yes, sir.

Senator KILGORE. And the loss to merchants which would also be reflected in income taxes?

Mr. SCHUCK. Yes, sir.

Senator YOUNG. Mayor Schuck, I think you made a very good case, but one of the reasons why it is very difficult to get necessary appropriations for civil function projects such as this is because they have been labeled all over the Nation as "pork-barrel" projects. Would you call this a pork-barrel project?

Mr. SCHUCK. No, sir; I would not call it a pork-barrel project in any way. The two Senators from my State know that I don't vote for them for the Senate. That is as near as I can get to it. But this is not a pork barrel, sir. This is a matter in which the Government itself, if the chairman please, would profit very, very materially, by having this wall intact.

In the income tax, I don't think there is any question about that, because this involves thousands of workingmen. It is not just simply a small industry or an isolated industry here or there. Thousands of people are involved in this matter. By reason of that fact, the Government naturally loses what the income tax would be from many, many, many of those men—thousands of them. They get big wages, big salaries, and so on and so forth. So that loss, even for 2 or 3 days, if the flood was up, would be big. But you must understand it is at least a week or 2 weeks before those industries can resume work, after they have been cleaned up.

EFFECT OF FLOOD ON RAILROAD TRANSPORTATION

Senator KILGORE. You spoke of transportation. On the B. & O. Railroad, coming out of Baltimore and Washington, one branch goes to Pittsburgh; another branch goes to Grafton, and there it splits and one branch goes to the lakes and another branch goes through Parkersburg into Chicago. A bad flood disrupts the branch going through Benwood, just south of Wheeling, and you have one-third of that western line broken; is that not correct, Mayor?

Mr. SCHUCK. That is correct. And I think perhaps you have underestimated, Senator. I think you would have to cut off the line going north, toward Wheeling. You would cut off the line going south to the southern part of the State, and Ohio as well, and you would also cut off the branch that runs through Grafton and, consequently, to the east.

Senator NEELY. Mr. Chairman?

Senator YOUNG. Senator Neely.

Senator NEELY. Mr. Chairman, in the hope of obtaining bipartisan assistance, I venture to say that Mayor Schuck is a distinguished,

lifelong, active Republican. I now introduce Mr. Robert Plummer, who is an equally distinguished, lifelong Democrat. He is the city manager of Wheeling.

Senator YOUNG. We have about 30 or 40 witnesses waiting here. If any of you have statement you would like to file and highlight them, in the interest of time, that would be very helpful. I think you have already made a very good case.

Senator NEELY. Mr. Chairman, our oral testimony will be brief.

CITY OF WHEELING, W. VA.

STATEMENT OF ROBERT L. PLUMMER, CITY MANAGER

GENERAL STATEMENT

Mr. PLUMMER. My name is Robert L. Plummer, city manager of the city of Wheeling.

I may say I intend to be very brief, Senator. I appreciate the need for time as there are many other people to be heard. But I may say in the matter of the pork-barrel appropriation my earliest memory of an Ohio River flood was some 50 years ago when my grandmother took us out of our home in a horse-drawn carriage and it was a week or more before we got back.

WHEELING FLOOD STAGE

The flood stage at Wheeling is 36 feet. At 45 feet it is a disaster. It means that ten or twelve thousand persons are either evacuated from their homes or risk their lives in the second stories. A 50-foot flood, and from there on, 20,000 population out of the 60,000 are simply homeless. We have evacuation stages, we have Red Cross help, and I have even seen the United States Coast Guard in the city helping in rescue work.

I can recall the danger of conflagration in the flood of 1913. One of our large industries caught fire with no possibility of it being extinguished by ordinary means. That is the time Mayor Schuck referred to 16 persons plunging into the water-filled streets.

I do not intend to dwell on that, but I do feel that the humanitarian side of this will not be overlooked by the committee. I realize the industrial importance. Not so long ago, you will recall pictures of Holland and the international character of the publicity given to that disaster. I may say as a former newspaper reporter and editor, and then a city manager, I have seen scenes in the city of Wheeling that would far surpass any photograph of the disaster in Holland.

I have seen streets and alleys filled head-high with litter and debris, and every form of flood damage that can be placed upon the community.

FLOOD DAMAGE

I would like to amplify on one question. There has been something said by Senators Neely or Kilgore as to the extent of damage. According to my best statistics, the direct damage from floods, not entailing all the loss in the employment, and so forth, but the direct damage from floods, property damage, cleaning up damage—I recall

one time as city manager we spent over $105,000 and almost went bankrupt out of the ordinary budget, clearing the streets. We have often called upon prison labor, and voluntary labor. But the direct damage from floods, as I have it, from 1873 is $108 million. I once heard you at another hearing estimate the damage, I don't know the source, at $250 million. I am sure I recall your saying that you had good authority for such a statement.

SEWAGE AND POLLUTION DISPOSAL PLANT

I would like to say one more word as to the mayor's statement as to the sewage and pollution disposal plant which the city of Wheeling now, at West Virginia, as a member of the eight-State pact, is compelled to carry out. We are preparing to bond ourselves for $7.5 million to remove pollution from the Ohio River. The mayor fortunately had something to say here and there, because he usually covers things so adequately and completely, but he missed one thing I would like to add to the record, that the key or the heart of this entire program will be the disposal plant itself. There will be lateral sewers come down our Wheeling Creek Valley and north and south along the Ohio River. At 29th Street right directly in this flood district, will be our disposal plant, will be the only place it can be put. Without a floodwall, no matter what the eight-State pact says, or no matter what the State authorities may say, I can't conceive how that system, which we are called upon to build, can be built. Something has been said about the reservoir dams, and then I will close.

There has been a theoretical estimate placed on a 45-foot stage after the completion of this project. The mayor referred to that subject. I have figures from the United States engineers from Pittsburgh, not many months ago, which will show that by a change in the storm center, taking the 1936 flood, for example, that that flood under present conditions or the conditions then prevailing, would be 48 feet. In other words, there is no controlling nature by a single gage of any kind.

A 42-foot flood, will knock out our steel industries. We, again, feel and pray that the appropriation should be restored because, on the pork barrel feature, gentlemen, as I say, we have been fighting old man river for years and years and years, and we have a peculier typographical program, but I assure you that this is nothing that we expect in the way of any governmental gratuity, and we are prepared to do our part. We feel that the great Ohio Valley, not necessarily just Wheeling, but we are a hub center of the valley, would like such consideration.

Thank you, sir.

Senator NEELY. Will the distinguished Mayor Deegan, of Benwood, please come forward.

Mr. DEEGAN. I will give my time to Mr. Ayres.

Senator NEELY. Mr. Chairman, let me now introduce Col. Austin Wood, the head of the greatest newspaper organization in West Virginia. He is an eminent lawyer and also a distinguished Republican. Colonel Wood speaks for more newspaper readers than any other man in West Virginia.

WHEELING NEWS-REGISTER AND INTELLIGENCER, ALSO PUBLISHING 12 OTHER WEST VIRGINIA DAILIES

STATEMENT OF AUSTIN V. WOOD, PUBLISHER

WHEELING FLOODWALL

Mr. WOOD. May I just speak from here? I think we have taken up too much time already, and I don't know of very much that we could add. I think we all recognize the necessity of this floodwall in Wheeling and it comes down largely to a matter of the expenditure. Senator, going over your suggestion in my mind, roughly, of course, I have computed what our deduction in Wheeling would be from the small damage we suffer from the flood. As a flood of 41 feet hits our pressroom, we are out of business for perhaps a week. Now, just sitting here computing in my mind what the Government loss is from our small damage, compared with the steel mills and other industrial plants, just the water in our pressroom, I have computed that the loss to the Government in tax deductions on that for 1 week is approximately $60,000. You take the figure that has been given us of direct damage by the engineer of $6 to $9 million in a year, that is no doubt corporate loss because he would have no way of computing any other direct loss. So if you take the present rates, normal rates of taxation on corporations, and not considering excess profits taxes, you would then have approximately 60 percent taxation on $9 million which would be something over $5 million, or between $3 million and $5 million loss to the Government in direct taxes, not considering the payroll loss and so forth, which would more than pay for that floodwall in a few short years. We have a flood about every 3 years. I don't know what the statistics are, but I know that every 3 years we have a flood.

Now, I have one more statement that I do not make in an impertinent manner at all, which was brought to my mind by your suggestion of pork-barrel legislation, pork-barrel appropriations.

IMPORTANCE OF PROJECT

I very much favor, in our papers, balancing the budget and cutting taxes at the earliest possible moment. But at the same time there are certain normal functions of government that must go on. I think that the building of a flood wall and flood protection long ago passed out of the category of pork barrel, like the building of post offices and the building of this and that and the other. I have no doubt in the world that if a flood wall were called for by France or Belgium or any other nations, under our military appropriations, our military aid program, Mr. Stassen would find no difficulty whatsoever in classifying what we now ask for Wheeling as a military expenditure in Europe.

Senator YOUNG. I agree with you. It might be an easier appropriation to get, unfortunately.

Mr. WOOD. I have seen myself in Europe, under the category of military aid, things much farther removed from military than this flood wall, protecting the humans.

Senator KILGORE. Mr. Wood, what is your official capacity with the newspaper?

Mr. WOOD. I am the publisher. I am the managing director.

Senator KILGORE. How many papers are in the syndicate?

Mr. WOOD. We have 12.

Senator YOUNG. Thank you very much.

Senator NEELY. Mr. Chairman, Mr. Earl H. Ringler, an able representative of the Ohio Valley Trades and Labor Association, is our next witness.

OHIO VALLEY TRADES AND LABOR ASSEMBLY, WHEELING, W. VA.

STATEMENT OF EARL H. RINGLER, PRESIDENT

PREPARED STATEMENT

Mr. RINGLER. Mr. Chairman, I have a prepared statement from the Ohio Valley Trades and Labor Assembly. Due to the time element I wish to present this and have it incorporated into the record.

Senator YOUNG. Thank you. It will be placed in the record.

(Mr. Ringler's statement follows:)

OHIO VALLEY TRADES AND LABOR ASSEMBLY,
Wheeling, W. Va.

GENTLEMEN: Because of the floods in the Ohio Valley, Wheeling labor has suffered tremendously by reduced production. When production suffers, payrolls also suffer. With payrolls reduced the revenue from taxes is also given a setback.

Thus, in making an investment in the Wheeling flood wall, our Federal Government not only gains by increased tax revenue, but it also profits indirectly by the increased valuation of the land protected by that flood wall.

In Wheeling there is an abundance of land in deplorable home sites that could be revalued as industrial sites. On these new sites—industrial and residential—more tax revenue would be available.

As President of the Ohio Valley Trades and Labor Assembly, AFL, we want to say that your action on this flood wall means greater defense production, better sources of tax revenue, less misery and suffering for the workers and industry of our community.

In speaking to you men of conscience—men with a sense of obligation—may we humbly ask your consideration for justice and happiness in a project worthy of Federal approval.

Respectfully submitted.

EARL H. RINGLER, *President.*

Senator NEELY. Mr. Wilson Connelly, the popular president of the Wheeling Building and Construction Trades Council, please proceed.

BUILDING AND CONSTRUCTION TRADES COUNCIL, WHEELING, W. VA.

STATEMENT OF WILSON E. CONNELLY, PRESIDENT

WHEELING FLOOD WALL

Mr. CONNELLY. I too, have a prepared statement covering the facts and the request for a flood wall. We have the natural resources, the manpower, and we have the ability to do the defense work. We also have the Ohio River. If you can separate our potentialities from the rising Ohio River, we can lend a greater effort to any national emergency. There is one other thing that has not been brought out: With the building of this flood wall, it will keep Route 40, which is a vital link in any national emergency, free of blockades by the river.

I would like to picture one thing: In 1942, in December, I had the occasion and it was in a 24-hour period, to come to a point right above

the B. & O. Railroad's yards, the Benwood Mill of the Wheeling Steel Corporation, which at that time was in vital defense production for pipe. As I came there at sundown, I saw trains back as far over into Ohio, and any place they could put these defense products in these trains, they had them stored all around. I saw the Benwood Mill completely closed down within a period of 24 hours from the time I left there. It is the most vital thing in the Ohio Valley, I think, that the United States Government can lend their assistance to.

(Mr. Connelly's statement follows:)

BUILDINGS AND CONSTRUCTION TRADES COUNCIL
OF WHEELING AND VICINITY,
Wheeling, W. Va.

GENTLEMEN: Our city of Wheeling now has 1,019 more people than it had in 1921, a growth of only 31 people a year. This figure is not typical of our national increase of births over deaths.

The population of West Virginia, in the same period, expanded by half a million. Almost any of the 55 counties in our State averaged 10 times the growth of Wheeling, which comprises the major part of Ohio County.

Actually the population of Wheeling decreased 2,208 between 1940 and 1950. The reason for this lack of progress can be laid directly to the Ohio River floods.

As an official representative of organized labor, I know that industry has been reluctant to build in a territory subject to the damage of periodical floods.

The flood wall we seek means a greater potential for Wheeling; a greater defense area to serve the United States; more industries to be served by our own natural resources; more employment for workers and more regular work opportunity for our union members. All of which adds up to greater production than before.

As president of the Building and Construction Trades Council of Wheeling and vicinity, AFL, we ask approval of this flood wall. By providing it you will help Wheeling strengthen our national defense.

Respectfully submitted,

WILSON E. CONNELLY, *President.*

Senator YOUNG. Senator Neely?

Senator NEELY. Mr. M. D. Ayers, the outstanding chief engineer of the Wheeling Steel Corp., is our next witness.

WHEELING STEEL CORP., WEST VIRGINIA

STATEMENT OF M. D. AYERS, CHIEF ENGINEER

GENERAL STATEMENT

Mr. AYERS. I am M. D. Ayers, chief engineer, the Wheeling Steel Corp.

As a representative of steel I wish to point out that this proposed flood wall will protect our Benwood plant. I have information here which I wish to put into the record, but briefly this plant is a fully integrated steel-producing plant. The primary product is pipe. We make about 330,000 tons of pipe yearly. In this plant there are something over 2,500 employees.

Whenever the river comes to around 42 feet production is down while the river is up. When the river goes down, there is an ordinary clean-up job, and then they get into operation as soon as possible.

PRODUCTION LOSSES

I have here a record of the floods since 1936, the production that has been lost due to these floods, also the man-hours which have been

lost, which amounts to 729,000 man-hours. There have been recent modernizations and improvements to the plant. Also we have a brochure here which contains pictures of the plant and the operations in the plant which will show clearly what is involved.

I would like to put these into the record.

Senator YOUNG. The statement on man-hours lost will be placed in the record.

(The information referred to follows:)

FLOOD EFFECT ON BENWOOD STEEL PLANT

The Benwood plant of the Wheeling Steel Corp. is located in an area that will be protected from floods by the proposed new flood wall for Wheeling and Benwood, W. Va. This plant is a completely integrated steel-producing operation consisting of 1 blast furnace for the production of pig iron, 2 Bessemer converters for the production of steel, and the necessary rolling and finishing facilities required for converting the steel produced into pipe. The steel-ingot production of this plant in 1951 was 390,259 tons, and there are 2,566 men employed in this plant.

Listed below are the more serious floods that have occurred since January 1, 1936, the length of time that steel production was interrupted, and the loss in steel production and man-hours.

Date	Idle time in hours	Production loss in ingot tons	Man-hours lost
Jan. 29, 1952	24	1,700	26,063
Dec. 5, 1950	30	1,480	16,200
Apr. 15, 1948	52	2,350	30,623
Mar. 8, 1945	104	4,700	60,223
Dec. 31, 1942	83	4,002	66,035
Apr. 28, 1937	104	4,430	84,832
Jan. 23, 1937	272	11,300	238,497
Mar. 19, 1936	240	9,570	207,121
Total	909	39,012	729,654

Future floods, if protection is not provided, will result in greater losses than those shown above because of the increased production capacity that has been completed in recent years. Also, an additional project is under way which will make possible the processing of an additional 60,000 tons of steel ingots per year. This project is covered by Certificate of Necessity No. TA–12079 for $1,410,000 which has been issued by the Defense Production Administration, and the materials required by this project have been allocated by the National Production Authority.

WHEELING STEEL CORP.,
M. D. AYERS, *Chief Engineer.*

CONSTRUCTION PROGRAM

Senator ROBERTSON. Mr. Chairman, at this point I would like to ask the Army engineers how long they anticipate it will take to complete the project estimated to cost $19.5 million on the current basis of seawall construction and how much benefit from time to time these relatively small amounts will provide.

Colonel HIATT. The construction program for this project extends for 4 years, Senator.

Senator ROBERTSON. For how long?

Colonel HIATT. Four years, based on the assumed rate of appropriations which would permit optimum construction. The small appropriations in the past 3 years, I believe it is, 2 or 3 years, to which the Senator refers have been for planning and have been of the order

of $50,000 to $75,000. They have gotten the planning on this project ready for construction. There have been no construction funds appropriated for this project; it is considered a new start.

Senator ROBERTSON. Will any benefit be derived until the entire project has been completed?

Colonel HIATT. Yes, sir; it is conceivable there could be. For instance, the northern part of the project, Senator, along the east bank of the Ohio River and up Wheeling Creek.

Senator ROBERTSON. What is going to be required to keep this pipe company from going down when the river goes up?

Colonel HIATT. The completion of this project, Senator.

Senator ROBERTSON. That is what I anticipated.

Colonel HIATT. Yes, sir.

Senator ROBERTSON. You would have to complete the project before that would be relieved of that flood hazard?

Colonel HIATT. That is pretty much of a simplification of it, Senator. There might be worked out an expedient plan if the project were partially completed with sandbags and a fierce flood fight we might be able to protect some works, but it would not be an ordinary, normal well-engineered job.

Senator YOUNG. When the project is compelted it will give at least protection to the city of Wheeling?

Colonel HIATT. Yes, sir; to those parts of Wheeling and Benwood that are in the flood zone.

COST OF PROJECT

Senator ROBERTSON. What makes the flood prevention and bank protection program cost $19.5 million?

Colonel HIATT. Well, there are several reasons, Senator. It is quite a long levee and wall, about 7 miles long altogether, with 3 or 4 pumping plants of quite high capacity. The foundations have to be carefully treated so they will be watertight. The construction has to be very secure.

Senator ROBERTSON. What is the character of the pumping stations? Is that a temporary installation or permanent installation?

Colonel HIATT. That is a permanent installation, a part of the project to take the flood drainage and floodwaters that accumulate behind the levees on the land side and get them over into the river.

Senator KILGORE. You have the Wheeling Creek coming in there; is that not a fact?

Colonel HIATT. Yes, sir.

Senator KILGORE. And there are certain other streams that have to be pumped outside the wall?

Colonel HIATT. Yes.

Senator ROBERTSON. Is there anything else involved in this project other than flood prevention?

Colonel HIATT. No, sir.

RATIO OF BENEFITS TO COST

Senator ROBERTSON. What is the ratio you estimate of benefits to cost?

Colonel HIATT. 1.1 to 1.

Senator ROBERTSON. In other words, a fraction higher benefits as to what it is going to cost?

Colonel HIATT. We estimate that there would be a 10 percent exceedance of benefits over cost; yes, sir.

Senator ROBERTSON. Have you fully completed figures like the last witness presented, for example the number of man-hours lost as a result of previous floods so that they may all be entered into your computations?

Colonel HIATT. I will have to check that on this particular project, Senator.

Senator ROBERTSON. I want to say that it is a rather thin profit margin here to undertake a $19 million project, and I gathered from a witness who testified this morning that it is a right serious menace that threatened them. I had assumed that in a great industrial area of this kind the ratio might be a little higher than the engineers have estimated; I would not know.

Colonel HIATT. Normally, Senator, our estimates of benefits are limited to the real damages and the direct damages that result from the high waters to buildings, facilities, structures, and the indirect damages such as the cost of cleanup and the interference with the economic life of the community. Those indirect things are not normally evaluated in our benefit-cost ratios.

I would like to check it on this specific project, though; sir.

LOCAL PARTICIPATION

Senator KILGORE. One other question. What participation are the city of Wheeling and other communities going to have in the way of rights-of-way and that sort of thing?

Colonel HIATT. Yes, sir; there is a considerable amount.

Senator KILGORE. How much is it?

Colonel HIATT. I will have to find that, sir. We have that, and we will put it in the record at this point.

Senator YOUNG. That will be done.

(The information referred to follows:)

The total estimated costs to local interests for local cooperation in the Wheeling-Benwood is $4,542,800. Both cities—Wheeling and Benwood—have executed formal assurances of local cooperation as required by law and assurances have been executed by the Secretary of the Army.

SEWAGE DISPOSAL SYSTEM

Senator KILGORE. Is the planning of the sewage disposal system for that entire area, which is a requirement now under the 8-States agreement, dependent upon some assurance for the building of the flood wall in the immediate future?

Colonel HIATT. Yes, sir.

Senator KILGORE. In other words, they cannot complete their plans and start their work at all, and that amounts to some $6 million, does it not?

Colonel HIATT. As I understand it; yes, sir.

Senator KILGORE. And the operation of that in conjunction with the flood wall will net both a savings to the Federal Government as well as a savings to the cities of Wheeling and Benwood; is that right?

Colonel HIATT. Yes, sir.

Senator KILGORE. It does not just cover one city, but the city of Wheeling and the outlying communities?

Colonel HIATT. That is right.

Senator YOUNG. Senator Neely, you may proceed with your witnesses.

Senator NEELY. Our next witness is Mr. Robert R. Jewell, the enterprising president of the Ohio Valley Board of Trade.

OHIO VALLEY BOARD OF TRADE

STATEMENT OF ROBERT R. JEWELL, PRESIDENT

GENERAL STATEMENT

Mr. JEWELL. Mr. Chairman and members of the committee, this report which I wish to file shows the financial and economic loss to Wheeling and industry by reason of inadequate protection. This report was made by the Ohio Valley Board of Trade, of which I am the president. It was made at the request of the Wheeling Planning Commission, and we developed and compiled the factual information pertaining to the various phases occasioned by the frequent floods.

I would particularly like to call your attention to the photograph in the back of the statement, which is the result of quite a few questionnaires which we mailed and sent to the various business and industrial organizations in the area, and the information which we have compiled as a result of those questionnaires.

I think that there is just one thing I would like to add to the statements that have been made here, and that is from a business and industry standpoint that the Wheeling-Benwood flood wall and the whole area is one of the first things that we have to do to further develop the Ohio Valley. We have talked about the loss of money to the Government from taxes, but I do not think we have said yet that as a result of this flood wall considerable new taxes would be available to both the Federal, the State, and local governmental bodies.

Thank you.

Senator YOUNG. Thank you very much.

Senator NEELY. We have next the tireless Mr. F. Leslie Body, of the Wheeling Board of Trade.

OHIO VALLEY BOARD OF TRADE

STATEMENT OF F. LESLIE BODY, MANAGER

GENERAL STATEMENT

Mr. BODY. Mr. Chairman and members of the committee, I am speaking now as the manager of the Ohio Valley Board of Trade with over 1,000 members and representing 365,000 people in our metropolitan area according to our last census. You have heard this morning about the direct loss by reason of floods. It is impossible to give any estimate of the loss through intangible action. I want to emphasize just two points, gentlemen.

LOCAL CONTRIBUTION

One is that the citizens of Wheeling will be called upon to assess themselves $3,400,000, and the citizens of Benwood $2,500,000 for financing their part of the construction of this flood wall. In addition to that, over $6 million for the interceptor sewer system will be involved. I believe by that ratio, and the cost to the Government will show, that they are indeed penalizing themselves to protect themselves against disaster.

Wages are nonrecoverable. We know that when we have a high water what it means to industry. May I mention this, that the industries of the Ohio Valley during World War II had an unusual record in earning more Army and Navy E awards for their defense participation than any other community in these United States in ratio to the industries in the area.

Senator YOUNG. Thank you very much, Mr. Body.

Mr. BODY. Thank you, gentlemen.

Senator NEELY. Mr. Chairman, I now have the pleasure of introducing Hon. Carl G. Bachmann, for a long time a distinguished Member of the Congress, and for quite a while the Republican whip of the Congress and later the mayor of Wheeling.

STATEMENT OF HON. CARL G. BACHMANN, FORMER CONGRESSMAN FROM WEST VIRGINIA

GENERAL STATEMENT

Senator YOUNG. We are delighted to have you, sir.

Mr. BACHMANN. Mr. Chairman, I just wanted to add this in including the testimony here before the committee. All of industry, all of labor, all the civic organizations, the council of the city of Wheeling, and the people there generally, we are all united in this plea that we are making here before this committee.

Senator YOUNG. I think you are making a very good case. If you do not get this appropriation, it will not be your fault.

Mr. BACHMANN. Thank you, sir.

Senator NEELY. Let me next introduce an able former Republican Congressman who served in the House with Senator Robertson, the Honoramle Andrew C. Schiffller, of Wheeling.

STATEMENT OF HON. ANDREW C. SCHIFFLER, FORMER CONGRESSMAN FROM WEST VIRGINIA

GENERAL STATEMENT

Mr. SCHIFFLER. I might add that I also served with Senator Dworshak.

I have nothing to add to what has been said. I heartily endorse this. I think it is worth while. I think it has its civilian as well as its national-defense value, and I hope this committee at the proper time will very seriously give it consideration.

Senator YOUNG. Thank you very much.

Mr. SCHIFFLER. Thank you, gentlemen.

Senator NEELY. Mr. Chairman, may I speak briefly in behalf of an appropriation of $1,400,000 for the Wheeling-Benwood flood wall project?

Senator YOUNG. Yes, sir.

STATEMENT OF HON. MATTHEW M. NEELY, A UNITED STATES SENATOR FROM THE STATE OF WEST VIRGINIA

WHEELING FLOOD WALL PROJECT

Senator NEELY. Mr. Chairman and members of the committee, there are a number of grounds on which my extemporaneous appeal to you will be based. The first is scriptural. The others are patriotic, historic, economic, and humanitarian.

The scriptural ground is the assurance voiced by the Master in His Sermon on the Mount, "Ask and it shall be given you; seek and ye shall find; knock and it shall be opened unto you." We are asking you; we are seeking from you; and we are knocking at your door for an appropriation that will render it possible to proceed with the construction of the Wheeling-Benwood flood wall, the important facts in relation to which have this day been concisely, clearly, and, we trust, convincingly detailed to you by a cloud of highly distinguished, wholly reliable, and thoroughly informed witnesses.

HISTORICAL BACKGROUND OF WHEELING

My historical and patriotic grounds lie in the circumstance that Wheeling, first known as Fort Fincastle and later as Fort Henry, was in September 1782 the scene of the last battle of the Revolutionary War. In that conflict a few American heroes defeated an attacking party composed of British officers, British soldiers, and 250 American Indians. If that battle had been lost the war might have been lost and our then recently declared independence might not have survived.

Wheeling is one of West Virginia's most important cities. It was the first capital of the State. Subsequently Charleston became the seat of government. But in 1875 Wheeling was again made the capital of West Virginia, which for 10 years it continued to be.

FLOOD EFFECTS ON BUSINESS

The city is surrounded by coalfields so vast as to defy exhaustion for hundreds of years to come. It has more than a hundred important, diversified industries, many of which are in what is known as the flood area. Since 1884 more than 30 major floods have scourged the Wheeling-Benwood area. It is conservatively estimated that the total direct damage inflicted by these floods exceeds a quarter of a billion dollars. The direct loss caused by the 1936 flood alone amounted to more than $8,400,000. Every major Wheeling flood has caused the suspension of the operations of a large number of the city's most important establishments. As a result of every suspension, thousands of working men and women were unavoidably and indefinitely deprived of their employment, and among these and their families suffering was widespread.

If the Wheeling-Benwood flood wall such as the Corps of Engineers has recommended had been constructed 50 years ago, it would have prevented damages that have amounted to more than twice as much as the wall would have cost; it would have protected thousands of flood victims against hardships too various for delineation and against suffering too great for financial reparation.

ECONOMIC INVESTMENT

In view of the testimony before the committee, it is earnestly contended that the construction of the Wheeling-Benwood flood wall would be a sound investment and, by no conceivable stretch of the imagination, a hazardous speculation. Competent authority has certified that, in existing circumstances, a flood comparable to that of 1936 would cause damages of $16 million, or eight-ninths of the Federal Government's share of the cost of constructing the flood wall for which we are pleading. After completion, it would, by the prevention of losses, soon pay for itself. It would forever end the intolerable, chronic flood affliction which, during the past 70 years, has caused enormous loss of employment, consequent loss of wages, untold damage to property, and unlimited distress to multitudes of men, women, and children.

Please let me supplement the grounds assigned or indicated with a personal appeal to the following distinguished members of the committee who are present—the chairman, the Senator from North Dakota, (Mr. Young), the Senator from Virginia (Mr. Robertson), and the Senator from Iowa (Mr. Dworshak).

Let me remind the Senator from Idaho that when I first entered the Senate in 1923 I joined his illlustrious predecessor, Senator Borah, in supporting every measure designed to promote the welfare of the people of his State. From then until now I have never failed nor faltered when Idaho needed my vote in behalf of any meritorious project or improvement.

May I not remind the eminent Senator from Virginia that in the House of Representatives nearly four decades ago I began to vote with the famous Carter Glass for appropriations for Virginia. During all the intervening years between then and now I have never failed to improve an opportunity to support an appropriation sought by the Old Dominion State, whether for the protection of its peanut industry, the construction of a public building, or for any other worthy cause.

Senator ROBERTSON. Senator, did you ever read that passage, "Make to yourselves friends of the mammon of unrighteousness"?

Senator NEELY. Of course, I have read that and every other word in the Bible many times. It is my hope that the distinguished Senator from Virginia, when determining how he shall vote on the pending question, will kindly keep in mind a certain other well-known passage of Scripture, "Whatsoever ye would that men should do to you, do ye even so to them." I earnestly entreat the distinguished Senator to improve his present opportunity to do for West Virginia what I have habitually endeavored to do for his State during my entire service in the Senate and the House.

I trust that it will not be considered an unpardonable asperity or an unforgivable immodesty for me to intimate that I have more than ordinary reasons to hope for sympathetic consideration from the Senator from North Dakota. I not only supported the appropriation for the construction of the world's greatest earth dam in North Dakota, but for all the other governmental Federal improvements that have been made during my membership in the Congress.

Senator YOUNG. We appreciated that.

Senator NEELY. During my first term in the Senate the Republican Governor of North Dakota appointed Gerald Nye a Senator to fill a

vacancy. The Republican leadership of this body opposed the seating of the appointee, because, as Senator Moses said, "They did not want any more sons of the wild jackass in the Senate." Senators Smith, of South Carolina, Stephens, of Mississippi, and I led the bitter fight for Mr. Nye, who was eventually awarded the place to which he had been appointed.

The seating of the present distinguished and beloved Senator Langer of North Dakota was also contested. Joseph Rosier, whom I, as Governor of West Virginia, had appointed as my successor in the Senate, upon my request, cast his vote in favor of the seating of Senator Langer.

Distinguished Senators, please do for West Virginia now as her sons, in similar circumstances, have long and eagerly helped to do for the States you so ably and faithfully represent. It is my fervent hope that not only those to whom I have referred by name, but that the entire committee will support the requested appropriation for the sum of $1,400,000 so that the construction of the important Wheeling-Benwood flood wall may proceed without delay.

From my heart I thank you all for the unsurpassable attention, patience, and kindness with which you have listened to the presentation of our case. As a reward for these cardinal virtues, which you have this day exemplified, and also for those which we trust you will demonstrate by voting for our appropriation, we sincerely hope that goodness and mercy shall follow you all the days of your life, and that you will dwell in the House of the Lord forever.

Senator ROBERTSON. Senator, I may just add to your eloquent plea that the junior Senator from Virginia is not unwilling to say that he was born in West Virginia.

Senator NEELY. Mr. Chairman, West Virginians are, without exception, proud of Senator Robertson, and they are glad that he is not unwilling for the world to know that he was born in the celebrated Panhandle State. If he should return to it and again become one of its famous residents, he would be received with open arms, a fatted-calf feast would be held, bands would play, and countless voices would sing, "Rejoice for the Lord brings back His own."

Colonel HIATT. Mr. Chairman, there were two questions asked which I was unable to answer a few minutes ago, and I would like to put them in the record at this point.

Senator YOUNG. Yes.

TOTAL LOCAL COSTS

Colonel HIATT. Supporting the former witnesses' testimony our records show that the total estimated cost of participation for the local interests for railroad relocations, industrial and commercial relocations, utility alterations, and land rights-of-way in the project exceed $4.5 million.

On the matter of whether we include the indirect damages in evaluating this project economically, sir, the benefits that we credit to this project are purely direct and do not include the indirect.

Senator YOUNG. Thank you very much.

Senator Neely, I still hope that you may find it possible to be at the Garrison Dam closure June 5.

Senator NEELY. Thank you.

Senator YOUNG. The committee will stand in recess until 2 p. m.

(Whereupon, at 1:15 p. m., the committee recessed to reconvene at 2 p. m. of the same day.)

AFTERNOON SESSION

Senator DWORSHAK. The hearing will come to order.
Senator Beall, we will be glad to hear you at this time.

ANACOSTIA RIVER BASIN FLOOD-CONTROL PROJECT

STATEMENT OF HON. J. GLENN BEALL, A UNITED STATES SENATOR FROM THE STATE OF MARYLAND

GENERAL STATEMENT

Senator BEALL. Thank you, Mr. Chairman and members of the committee.

This is the Anacostia River Basin flood-control project, more familiarly known as the Peace Cross over in Maryland, just over the District line.

Senator ROBERTSON. I am quite familiar with it.

Senator BEALL. I hope to impress upon you the great necessity for this project and its tremendous importance to our national welfare and security. Others will give more detailed testimony and will answer any technical questions the committee may have.

First, this is not a new project. Congress has been studying it at least since the 52d Congress, and we sincerely hope that the 83d Congress will take action. After years of study the project was approved by the 81st Congress; the 82d Congress appropriated money for planning. It is up to the 83d Congress to take some positive action.

We in Maryland are not asking the Federal Government to do the whole job—we ask only that the Federal Government accept its share of the responsibility.

As you know, the Anacostia goes through the District of Columbia and is primarily the cause of this problem.

MARYLAND CONTRIBUTION

Maryland last month made available the sum of $4,250,000 which can be spent as soon as the Federal Government appropriates funds which would permit the United States Army Engineers to proceed with construction. Maryland feels that the National Government's fair share of the costs should be $1 million.

FEDERAL RESPONSIBILITY

That the Federal Government does have partial responsibility to correct this flood situation has been recognized by Congress. A definite plan has now been worked out, Maryland is paying by far the greatest share of the costs, and Congress should cooperate.

In addition to the millions and millions of dollars in property damage which residents of the area suffer annually, thousands and thousands of Federal employees are inconvenienced every time a flash flood makes routes 1 and 50 impassible.

Those two highways are two of the most important highways into, and out of, the Nation's Capital. They connect the Capital City with such important defense installations as the Naval Academy in Annapolis, Fort George C. Meade, and Army Chemical Center at Edgewood, and the Ordnance Proving Ground at Aberdeen.

In these times it is of the utmost importance that our highways to such facilities be open at all times, and in the case of a great crisis, when it might even be necessary to evacuate Washington, then delay caused by floods might be extremely critical.

This area lies just across the District line and certainly the situation is of as much concern to the people of Washington as it is to the people in Maryland. We ask that the Federal Government cooperate with Maryland in completing a project in which there is a mutual interest. This committee is seriously requested to approve funds so that work may begin to control the flood waters of the Anacostia River.

ESTIMATED COST

Senator ROBERTSON. Senator, I notice that the project is estimated to cost $7,553,000?

Senator BEALL. Well, at this time, Senator, as I understand it, Maryland has proposed, or appropriated $4,250,000, and now is asking for $1 million at this time. I do not know what the plans are; I have to ask the engineers to answer that.

Senator ROBERTSON. Traveling north from Washington on Route No. 1, you strike No. 50 at Peace Cross?

Senator BEALL. Yes, sir.

Senator ROBERTSON. And turn right there to Annapolis?

Senator BEALL. Yes, sir.

Senator ROBERTSON. Is No. 1 an important highway?

Senator BEALL. It is the main link to Baltimore and the East, Philadelphia, and on up through there. It is an important highway and the only important highway connecting Washington. Well, there is another road, but it is the main artery between Baltimore and Washington.

Senator ROBERTSON. Some years ago I was with the congressional party in Hong Kong, and I got assigned a Pierce automobile, and I said to the Chinese chauffeur, "This is a fine car." He said, "No. 1 car in Hong Kong." You feel that No. 1 Highway is the No. 1 highway in this area?

Senator BEALL. Certainly. I doubt if there are many roads in the East that have as heavy a traffic load as Route No. 1.

Senator ROBERTSON. How do you account for the fact that you have no budget funds for construction?

Senator BEALL. I think that is the engineers' problem.

Senator ROBERTSON. According to our sheet, they did not ask for anything but planning money.

Senator BEALL. They have to have the plan first before we have any construction come in.

PLANNING FUNDS

Senator ROBERTSON. I believe we have an estimate here for planning money, but we do not have any for construction. I am not sure we have an estimate for planning money. You are asking now for what?

Senator BEALL. Money for the planning, and I think it is also to begin the construction. What I am worried about is that the Maryland State Road Commission could go ahead and eliminate the highway flooding, but to eliminate that danger it would endanger the property nearby and back into the District of Columbia. I think the project should be coordinated.

Senator YOUNG. There is $175,000 in the budget for planning on this project?

Colonel HIATT. Yes, sir.

Senator YOUNG. This project, is it ready for construction? In other words, if construction money were granted, would you be ready to proceed?

Colonel HIATT. We could initiate construction in fiscal year 1954 if so directed; yes, sir.

Senator YOUNG. Thank you very much, Senator.

Senator BEALL. Thank you, gentlemen.

We will be glad to hear from Congressman Small.

PEACE CROSS FLOOD PROJECT

STATEMENT OF HON. FRANK SMALL, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

GENERAL STATEMENT

Representative SMALL. Senator, we are here requesting some Federal funds to alleviate this flood condition at Bladensburg, known locally as the Peace Cross flood section of Maryland. This is on United States Routes 1 and 50. As you know, sir, Route 1 is the first through Federal route in the United States, and it is right at the door of the Capital of the Nation.

It has gotten so, lately, that it floods repeatedly at very close intervals. Some few years back the terrain around had not been developed and the leaves and grass and trees and so forth held back some of this water. Now that the area has been developed and has been paved, when it rains this water immediately rushes right down in this area.

STATE FUNDS

We in Maryland, at the last session of the legislature, passed a bill, an enabling act, which in fact instructs certain agencies in Maryland, the State roads commission, the county commissioners of Prince Georges County, the Park and Planning Commission, and the Washington Suburban Sanitary Commission, to contribute of State money, our money, $4,250,000. But it is contingent on having some Federal money.

Senator DWORSHAK. Have you not had any Federal money yet on that?

Representative SMALL. No, sir. Only for planning. We have not had a dollar, yet, for construction.

This is considered and was considered as an emergency project in the last several years. Then they stopped and hesitated, when the trouble started in Korea, on the construction of such dams or flood control projects, except in those instances where it had to do with the protection of our Government, the military protection; and this was classified then as a critical spot. It is a direct outlet from the Nation's Capital, and also on the route to the Naval Academy.

FUNDS REQUESTED FOR CONSTRUCTION

Senator ELLENDER. Are you asking for funds for construction?

Representative SMALL. Yes, sir.

Senator ELLENDER. To what extent?

Representative SMALL. For a million dollars to match our four and a quarter million. However, I hesitate to say this because I know if we intimate we can get along with less we will probably get less; however, in order that we may use our own money we must have some Federal money because our law is passed contingent on having some Federal money. It could be any amount which would technically let the Army engineers come into the area and spend some Federal money. Regardless of the amount, they could then spend our four and a quarter million.

TOTAL ESTIMATED FEDERAL COST

Senator ELLENDER. I notice the total estimated Federal cost is $7,533,000. Colonel Hiatt, that does not include the contribution of Maryland, does it?

Colonel HIATT. No, sir; that is the Federal cost.

Senator ELLENDER. Is the project sufficiently planned?

Representative SMALL. Yes, sir.

Senator ELLENDER. That is, we spent so far $103,000 for planning. Have the plans advanced to such an extent that you could spend a million from the Federal Government and 4 million from the State of Maryland?

Colonel HIATT. The general design memorandum is scheduled for completion very soon here, about now, sir; and the plans for the first year's construction can be completed so that construction could be undertaken on the first units in fiscal year 1954.

Senator ELLENDER. How much could you spend?

Colonel HIATT. We estimate $1,500,000.

Senator ELLENDER. Of Federal money?

Colonel HIATT. Yes, sir.

Senator ELLENDER. How much could you spend of State money?

Colonel HIATT. I don't have that figure available, sir.

Senator ELLENDER. Would you place in the record at this point the full amount you could spend, whether it is Federal or State money, or both?

Colonel HIATT. Yes, sir.

(The information referred to follows:)

One million five hundred thousands dollars could be used for initiation of construction in fiscal year 1954 on the Anacostia flood-control project. There would be associated local costs for land acquisition, highway, bridge and utility modifications, and other requirements from local interests. It is not known whether the State of Maryland or other local interests could furnish part of the funds required for the Federal program in fiscal year 1954.

OBLIGATIONS

Colonel HIATT. I said we could spend a million and a half, sir. I did not want to mislead the Senator. We would need a million and a half for our obligations. There might be some unexpected moneys at the end of the fiscal year.

Senator ELLENDER. Do you mean on an appropriation of a million and a half?

Colonel HIATT. Yes, sir. There might be some in our normal operations. You know, we have presented this earlier before this committee. There are some unexpended funds, a small amount, that are necessary.

Senator ELLENDER. What difficulties do you anticipate?

Colonel HIATT. Nothing unusual in this project.

Senator ELLENDER. Why would you not be in a position to spend all we would appropriate?

Colonel HIATT. Because we do not know when the fiscal year 1955 appropriation might be made, sir, and assuming that we came to the end of fiscal year 1954 and had some contractors that had to be paid in July of 1954 we would have to have the funds available and they might show as unexpended at the end of July 1954. It is possible. I think we will use the entire amount; if directed we could use the entire million and a half.

STATUS OF PLANS

Senator ELLENDER. With $103,000 that we have appropriated so far for planning, to what extent have you completed the plans to go on with this? Can you tell us that?

PERCENT OF COMPLETION

Colonel HIATT. Yes, sir. The general design memorandum, hydrology, is 85 percent complete, and is scheduled for——

Senator ELLENDER. Do you mean for the whole project?

Colonel HIATT. Yes, sir. The entire general design memorandum is about 50 percent completed and is scheduled for submission within the next few months. The planning for the initiation of construction is scheduled for completion at the end of this year, sir, this calendar year.

Senator ELLENDER. So that even if we appropriated the money now, you couldn't let contracts until December; am I right?

Colonel HIATT. That would be about the earliest, as I understand it, sir.

Senator ELLENDER. And that would be limited to a million and a half dollars.

Colonel HIATT. Yes, sir.

Senator ELLENDER. In toto?

Colonel HIATT. Yes, sir.

Senator ELLENDER. That is, whatever we would appropriate here, and what the State of Maryland could furnish?

Colonel HIATT. Yes, sir.

Senator ELLENDER. You may proceed, sir.

Representative SMALL. I simply wanted to point out, sir, that without some Federal aid we cannot even spend our own money.

Senator YOUNG. It can be carried over, can it not?

Representative SMALL. Yes, sir. Our four and a quarter million will be after the Federal Government puts in something, and then our money is available when the engineers call for it.

Senator ELLENDER. Suppose we should put up $250,000. Do you think there would be any difficulty to have the State of Maryland put up a million and a quarter?

Representative SMALL. I do not think so, sir. I hesitated to say that. I hate to get cut back. However, that is the fact, and rather than not get started, we would rather start now.

Senator ELLENDER. I am familiar with your difficulty there. As a matter of fact, I was caught in that 2 or 3 times, so I know what it is about, and that is why I am trying to give it a little push, if I can.

Representative SMALL. Senator, we would certainly appreciate it. You know what we are talking about, sir. I could sit here all day.

But the facts are we cannot spend our money without some little help. It should be fixed.

Thank you very much.

Senator YOUNG. Are there any other witnesses on this project, Congressman?

Representative SMALL. Mr. Ray is here, a member of the Washington Suburban Sanitary Commission. It is set up in this bill that they are to represent the group of Maryland commissions participating in this project.

Senator YOUNG. We will be glad to hear them at this time.

WASHINGTON SUBURBAN SANITARY COMMISSION

STATEMENTS OF L. S. RAY, MEMBER, AND HARRY B. SHAW, CHIEF ENGINEER

GENERAL STATEMENT

Mr. RAY. I understand, Mr. Chairman, we only have a few minutes. I would like to introduce Mr. Harry B. Shaw, our chief engineer, who has battled with this proposition for many years. He can give you some pertinent information which will be of interest to you, especially the part that the State of Maryland is to play in developing this project.

Senator YOUNG. You can file your statement in the record if you care to and then highlight it for us, Mr. Shaw.

(Mr. Shaw's prepared statement follows:)

STATEMENT BY THE WASHINGTON SUBURBAN SANITARY COMMISSION REGARDING ANACOSTIA RIVER BASIN FLOOD-CONTROL PROJECT

The flooding of the general Bladensburg area by the Anacostia River is not of recent origin. Indeed it is older than the United States itself. It may be said that the Nation inherited the problem, which the flooding of the river presents, when the Thirteen Colonies became the United States of America, because the inundation of the lands along the river adversely affects the national interest probably to a greater degree than it does the local communities, badly as they are damaged by the continuing flooding of the river.

While we have had these recurrent floods since colonial times, there was little effort to do something about the problem for many, many years for many reasons. First, the character of the watershed changed slowly so the problem became more serious only gradually. Second, the number of people affected by the floods was small due to sparsity of settlement and the small volume of travel. Third, Washington, D. C., was not the great and important city that it is today, so if it was affected by the floods at Bladensburg the impact on the national interest was small. Fourth, the financial outlay required to solve the flood problem has always been of such magnitude that local interests could not undertake it. It is only as a result of the postwar growth of Prince Georges County that it can now undertake it jointly with the Federal Government.

The problem created by the flooding of the Anacostia River has been recognized at the Federal level at least since the 52d Congress, when a report on the subject was submitted by the Corps of Engineers to that body. Other reports were received by succeeding Congresses until finally a flood-control project which would provide the required relief from the flooding of the Anacostia River was approved by the 81st Congress. The 82d Congress provided money for planning the work and what is now needed is money for beginning construction.

As stated, the problem is by no means a local one. The Maryland suburbs are becoming the master bedroom of Washington city. Tens of thousands of employees of the Federal Govenment work in Washington and live in Prince George's County, many of which have to traverse twice daily the area frequently flooded by the Anacostia River to get to and from their homes and work. Divisions of various Federal departments are located in Maryland across the Ana-

costia from the national capital. While it is true that in times when the river is in flood one can detour by some route at least around the flood to get to work, much Federal time is lost thereby as not only are the detours less direct but the great volume of traffic which occurs on them during such times greatly slows up traffic movement.

The above discussion relative to the specific Federal interest in this flood-control project deals with money and morale. There is a more important aspect of the matter as it deals with life or death. If you will observe the map on the easel you will see that the green area representing the limits of the 1933 flood of the Anacostia River lies athwart the red lines which are United States Highway routes Nos. 1, 1A, and 50. These are the main northerly and easterly routes of egress and ingress to the capitol city. Access to and from Fort George G. Meade, Headquarters of the Second Army, and the United States Naval Academy is by way of them. The closing of them by flood during an emergency might have disastrous results and presents a situation which should not be gambled with. Then there is the harrowing possibility of the necessity of evacuating great masses of people from Washington in a short time in the event of aerial attack. We understand that our military people believe that this can happen. Again I ask you to look at the map and consider first the confusion, then the congestion and finally the catastrophic conditions which would occur in the city and in the vicinity of where the highways mentioned would be closed by the flooding river in the event it was nesessary to get large masses out of the city in a short time. It is to be borne in mind that the bridges leading to Virginia and across the lower Anacostia would appear to be rather vulnerable to aerial attack, particularly if atomic bombs were used on the city. The bridges across the Anacostia flood plain in the locale of the flood-control project would be relatively unexposed, being low, short spans and remotely located from probable points of attack.

The general national interest in addition to the specific interest of the National Capital is involved in the flooding of the Anacostia. As previously mentioned United States Highways Nos. 1, 1A, and 50 traverse the area which is frequently flooded. A traffic count on highways U. S. 1 and U. S. 50 in May 1951 showed respectively 24,292 and 26,328 motor vehicles per day north and east of the Peace Cross. Where the 2 highways are coincident west of the Peace Cross the count was 33,607 vehicles. U. S. route 1 in particular is in addition a great motortruck route between the South and the North. The Peace Cross at Bladensburg where U. S. 1 and U. S. 50 join has been flooded this year already 15 days. In 1950 it was flooded 14 days, in 1951, 25 days, and in 1952, 29 days. This major highway junction has been flooded for as long as 111 consecutive hours. While it would be speculation to estimate what the detouring of traffic as a result of the closing of these highways by the flooding of the Anacostia River annually costs the general public, it is apparent from the volumes of traffic on the flooded highways and the frequency of the flooding that it is a very substantial amount, sufficient in itself to justify economically a very substantial appropriation by the Congress to prevent the continuing condition.

Maryland is directly affected, of course, by the recurring floods of the Anacostia and is willing to bear its share of the cost of eliminating them. In 1949 the general assembly of the State authorized the Commissioners of Prince Georges County, the Washington Suburban Sanitary Commission, and the Maryland-National Capital Park and Planning Commission to issue bonds for financing said projects and providing for the payment of said bonds by an ad valorem tax and authorized and directed the State roads commission to pay its share of the cost of said projects up to $1,500,000. It designated the Washington Suburban Sanitary Commission, which I represent, as the agency to deal with the Federal Government in regard to the flood-control project in the Anacostia River Basin and provided for the maintenance and operation of the flood-control works after their completion. Because of increases in costs, the General Assembly of Maryland in 1953 increased the authorizations of the Washington Suburban Sanitary Commission and the Maryland-National Capital Park and Planning Commission by $250,000 each to cover the part of the project to be carried out by these agencies. Because of expected modification of plans which would eliminate the commercial navigation aspect from the project it was not believed necessary to increase the existing $1,500,000 authorization of Prince Georges County. The State of Maryland and local interests have therefore provided for everything that they know will be required to meet the requirements of the Federal Government in connection with the construction, operation, and maintenance of the Anacostia River Basin flood-control project. The carrying out of the project lies now entirely with the Federal Government. We are not

asking for a handout. We recognize that joint interests are involved. We are ready to go further, we will go ahead with our part of the work as far as the Federal operations permit this to be done if Congress will appropriate sufficient money to begin its share of the project. We are willing to show our good faith and spend more of our money at the start than the Federal Government, if such is necessary. We cannot, however, afford to undertake the whole project, even if it was equitable that we should do so, which it is not.

As the flooding by the Anacosta River as a result of the changing characteristics of its watershed is becoming progressively worse, the necessity of relieving the conditions resulting therefrom has become imperative. Something must be done promptly. Unless positive action is taken by this session of the 83d Congress to appropriate money for providing permanent flood relief in this area, the local authorities will have to resort to some plan of partial relief as they do not have the money to do a complete job. This will be unfortunate as relief to only a portion of the people, and those not the ones who are directly and worst affected, will be provided. The highways will not be above all floods and Washington will not be afforded the protection it should have. Money will be spent on a temporary expedient which some day, of necessity, will be abandoned for a permanent solution. Such a plan now exists; the local interests are ready with their share of the money to carry it out; it seems illogical and shortsighted not to do so.

Mr. SHAW. Senator, if you don't mind, I would like you two gentlemen to take the statement and turn to the next to the last page on which there is a map which shows the location of this project. The map shows the United States Capitol where we are now, in the lower left-hand corner of the map, and the red lines indicate the major highways leading to the northeast out of Washington.

1933 FLOOD

The dark area that you see there which these highways cross represents the limit of the 1933 flood. So you can see that the major highways traverse this flooded area. Actually four of them, U. S. 1, U. S. 50, Rhode Island Avenue, U. S. 1A, and the extension of Michigan Avenue. This matter is something that is continuously recurring. Actually, if you read the statement when you have time, you will see a remark that this area has been flooded in the vicinity of Bladensburg 15 times in 1953. Actually that is when this statement was made up. Since that time it has been flooded three more times, namely, on the 17th, 18th, and 20th of May.

PEACE CROSS FLOODS

So, actually, these roads in the vicinity of what we call the Peace Cross in Bladensburg have already been flooded 18 times this year.

Mr. Small has covered the situation as far as Maryland is concerned. The necessary legislation has been passed authorizing the local agencies involved to participate in this project to the extent of $4½ million.

I think Mr. Small has also pointed out that this money is contingent upon the Federal Government providing construction money. The local work consists of reconstruction of roads and bridges in the area, the establishment of the necessary interior drainage facilities, the changing of the utilities, and the purchase of the necessary land. From the Federal standpoint, a look at the map will disclose that this thing is vital to the national defense. When I say vital I would like to change that and say important to the national defense.

In the event of an emergency exodus from the city it would be a very serious matter if it happened to be during the time of flood and

people could not get out of the city over these main thoroughfares due to the fact that they were flooded.

Senator ELLENDER. I notice that virtually all of this site where you have floods is in the State of Maryland.

Mr. SHAW. Yes, sir.

USE OF FUNDS

Senator ELLENDER. I presume that the $4 million that would be put up by the State of Maryland would be used to acquire rights-of-way?

Mr. SHAW. No, sir. That money includes that in part. It includes the land in part that would be required for the flood-control works. It also includes relocation of roads and bridges and also the changing of utilities in providing for the interior drainage. You see, the construction contemplates the straightening and widening of the present channel of the river, the construction of levees along the river. Levees presuppose pumping stations, and there must be means provided behind the levees to get the water to the pumping stations so it can be pumped out from behind them into the river in times of flood.

Senator ELLENDER. Suppose that we should provide a quarter of a million dollars of funds, let us say. Would it be possible to obtain from the State of Maryland a million and a quarter so as to have sufficient money in hand to do the work that the colonel said could be done during this fiscal year?

Mr. SHAW. Senator, I would say that once the Federal Government puts up any money, the State of Maryland can then put up such sums up to $4¼ million as it is able to efficiently use in connection with the Federal operation. We would have to coordinate our efforts with the Federal Government.

Senator ELLENDER. There is no limitation as to how this money from the State of Maryland could be used provided it is used on the project, whether it is to acquire land or whether it is to change utilities or whether it is to build a concrete road or build an elevated road. It could be used for whatever purpose they wanted?

Mr. SHAW. It could be coordinated into the Federal effort.

Senator ELLENDER. I wanted to make certain of that. You are sure of that?

Mr. SHAW. I think that is correct. In other words, we could build roads, we could build interior drainage, we could buy land; in fact, we would have to buy land, and we could change utilities.

Senator ELLENDER. You can readily see that unless we could coordinate the effort between the State and the Federal Government, it may be that you could do only certain things with the State money and other things with the Federal money and thereby not get the fullest measure for your dollar.

NON-FEDERAL OPERATIONS

Mr. SHAW. Senator Ellender, I want to make sure I am not telling you wrong. Our money is supposed to go for the things that I have told you which are considered by the Army engineers as non-Federal operations. We would build whatever of those things we could build so that they would work in with what the Federal Government did. Frankly, I think that $250,000 is too small a sum.

Senator ELLENDER. You heard the preceding witness say no matter what we put up they could spend $4 million right off the bat. I wondered whether or not that would be done. Usually the State money is there in order to purchase rights-of-way and change utilities and things like that. That is their contribution. I am just wondering if, in this project, you approach it differently.

Mr. SHAW. My judgment is, Senator, that we couldn't effectively spend $4½ million if you only put up a quarter of a million.

Senator ELLENDER. I do not mean that. I did not mean to spend the whole amount. But suppose we put up a quarter of a million, and the colonel said we could only spend a million and a half next year, whether we could spend our quarter plus the million and a quarter that would be put up by the State of Maryland so as to make up the million and a half that the colonel said he could spend.

USE OF STATE FUNDS FOR FEDERAL OPERATIONS

Mr. SHAW. I question whether the State of Maryland could put up money toward Federal operations. I don't think that is the intent of the bill.

Senator ELLENDER. Unless that is cleared up, I would like to have it cleared, as far as I am personally concerned, before I vote to put up any specific amount on the part of the Government.

Mr. SHAW. I think what we will have to do, then, is to go back and read the law closely and see what the law authorizing the appropriation says.

Senator ELLENDER. It is up to the proponents of this measure to show us, not us to go look up the law.

Representative SMALL. I have a copy of the bill in my office, and I would be glad to send up a copy of the bill, sir.

Mr. SHAW. Would it be possible for us to inform the committee precisely as to that?

Senator ELLENDER. Suppose you do this: Send us a little memorandum and let us know the extent to which you could contribute, that is, the State of Maryland could contribute, if we should decide to put a half million dollars, let's say, at the most. Suppose we put up a half million dollars, how much could Maryland put up.

Mr. SHAW. Put up effectively.

Senator ELLENDER. Yes, that is right. So as to do what the engineers say can be done within the next fiscal year. You heard them testify just now. Colonel Hiatt said he could spend a million and a half dollars. I would like to have an answer to that before I am able to vote how much we are going to put up.

Mr. SHAW. I can see your point, and we will do that, sir, and furnish the committee a memorandum.

Senator DWORSHAK. How soon can you furnish that?

Mr. SHAW. I could say we could furnish it before the middle of next week, if that would be ample time.

Senator ELLENDER. That will be all right.

Senator DWORSHAK. Do you want the memorandum in the record?

Senator ELLENDER. Yes.

(The information to be submitted follows:)

WASHINGTON SUBURBAN SANITARY COMMISSION,
Hyattsville, Md., May 25, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions of the Appropriations Committee, United States Senate, Washington 25, D. C.

DEAR SENATOR KNOWLAND: Pursuant to the inquiry of members of the committee at the hearing before the Subcommittee on Army Civil Functions on May 15, 1953, we are submitting this letter concerning the amount of money, contributed locally, which might be expended advantageously should the Congress authorize $500,000 for the beginning of construction of the Anacostia River Basin flood-control project. After a review of the work contemplated by the Army engineers as the initial step in the construction of this project, this commission is of the opinion that the following portions of the work, involving the expenditure of the sums indicated which would be contributed by local agencies, could be begun:

Land and buildings	$350,000
Anacostia River Bridge at Bladensburg	782,900
Northeast Branch Bridge on Baltimore Ave	673,500
Decatur Street Bridge, Edmonston	430,600
Interior drainage works	367,500
Utilities and local road changes	63,200
Total	2,667,700

Under chapter 728 of the acts of the General Assembly of Maryland of 1949, this commission is designated as the organization to contract with the Federal Government in matters relating to any projects for flood control and navigation in the valleys of the Anacostia River and tributaries within Prince Georges County, Md. The act, as amended in 1953, authorizes and directs the county commissioners of Prince Georges County, the Washington Suburban Sanitary Commission, and the Maryland-National Capital Park and Planning Commission to issue bonds in the respective amounts of $1,500,000, $750,000, and $500,000 for financing the Anacostia River flood-control and navigation project whenever an appropriation shall have been made by the United States of America for the construction in whole or in part of any such project. It also authorizes and directs the State Roads Commission of Maryland to pay out of its general funds sums up to $1,500,000 under the same condition.

Subsection (d), section 1 of the 1949 act, which is not amended, reads as follows:

"The proceeds from all bond issues hereinbefore authorized to be issued under this act shall be turned over to the Washington Suburban Sanitary Commission, with which proceeds it shall establish a separate fund to be designated as the 'Flood Control and Navigation Fund,' from which fund all costs of said flood-control and navigation projects, other than costs to be borne by the Federal Government and the State roads commission shall be paid. The proceeds from the bonds authorized to be issued by this act shall be applied toward the cost of constructing and relocating all county highways and bridges complete, the construction of recreational and commercial boat basins and the construction of necessary internal drainage facilities, the relocation of utility structures and for the acquisition of land and bouldings which it is necessary to acquire for the flood-control and navigation projects."

It will be seen from the above that whenever the Federal Government appropriates any moneys for the construction of the Anacostia River flood-control project the moneys are available from the Maryland agencies for the construction and/or relocation of: State and county highways and bridges, boat basins, internal drainage facilities, and utilities and for the acquisition of lands and buildings within the limits of the project. As stated above, such projects aggregating $2,667,700 can be started once a construction appropriation is made by the Congress for the Anacostia River flood-control project.

The total local contributions authorized by the General Assembly of Maryland aggregate $4,250,000. The remaining portion of this amount, which will not be used at this time, is available whenever the Federal Government carries out the construction remaining after the initial construction step is completed.

It is understood that the construction of a commercial navigation terminal, consisting of a basin, wharves, and attendant facilities, as set forth in House Document No. 202, 81st Congress, is not now contemplated by the Army engineers in connection with this project.

Respectfully,

WASHINGTON SUBURBAN SANITARY COMMISSION,
L. S. RAY, *Commissioner.*

PAST EXPENDITURES FOR FLOOD CONTROL

Mr. SHAW. The Senator has raised a point here that I think is very well taken. I can see why he wants that information.

Senator DWORSHAK. I would like to know also whether the Federal Government or the State of Maryland has spent any money in the past for flood-control work in that area.

Mr. SHAW. The State of Maryland has spent money for flood-control work only in the widening of the channel, the Park and Planning Commission did some work some time ago widening and deepening the channel of the river, and the State roads commission did the same thing some years back. That is not a sufficiently comprehensive solution.

Senator DWORSHAK. Has this flood-control problem existed for many years?

Mr. SHAW. This has existed since colonial times. It is older than the Nation itself. But the problem never got bad because the conditions in the watershed only changed gradually and now it has finally reached a point where it is worse than critical.

Senator ELLENDER. What you have done is to make it so that the water can concentrate more quickly.

Mr. SHAW. That is what happened. The erosion has silted up, and the runoff comes in more quickly and creates erosion which aggravates the problem and fills up the stream's channels.

Senator DWORSHAK. Does that complete your statement?

Senator ELLENDER. I believe we have it pretty well in mind. If you will give us that memorandum, I think we will be able to put our teeth deeper into it.

Mr. SHAW. Thank you, Senator.

Senator DWORSHAK. Is Mr. Spencer Smith here ready to testify?

UNITED STATES BEACH EROSION BOARD

STATEMENT OF J. SPENCER SMITH, PRESIDENT, AMERICAN SHORE AND BEACH PRESERVATION ASSOCIATION; CHAIRMAN, NAVIGATION COMMITTEE, ECONOMIC PLANNING DEVELOPMENT COUNCIL, NEWARK, N. J.

GENERAL STATEMENT

Mr. SMITH. J. Spencer Smith, president of the American Shore and Beach Preservation Association, and also chairman of the navigation committee of the Economic Planning Development Council, State of New Jersey.

Senators and gentlemen, Senator Hendrickson, of our State, could not be here, but he asked me if I would convey to you gentlemen his deep interest in this subject and his desire to see an appropriation made that we are asking for. He was very good last year to get at

least $75,000. We are asking for a hundred thousand or more if we can get it. What we are asking for, we think, is in the interest of economy. The reason for that is this:

Millions of dollars have been spent throughout this land on the gulf, Great Lakes, for beach-protection measures by well-intentioned people who did not know the facts, could not know the facts, and the money was spent and the storms just tore out the structures. I have been at this since 1915 in charge of our coastal line, and I know from personal experience how we tried, by the hit-and-miss method, to erect structures that would prevent erosion. Our Governor then, gentlemen, asked the governors of the coastal States to call a conference, and they came and our eyes were opened then to the need of cooperation and joint studies.

As a result of that conference, our association was born. That was in 1926. I have had the honor or being president ever since.

It is a national association in every way. We are not asking for any money for New Jersey, not asking for any money for any particular State, but we are asking for an appropriation to the United States Beach Erosion Board, which is one of the ablest boards in this country.

Senator ELLENDER. That is to be used merely for study?

STATE COOPERATION

Mr. SMITH. That is right. And the States have to cooperate. In other words, it is a 50–50 proposition. If a community wants a study made, they have to put up half the funds for the study.

Senator ELLENDER. As far as construction costs, they would have to be borne by the localities involved?

Mr. SMITH. Half the costs; that is right, sir.

Senator ELLENDER. No; I am talking about construction.

Mr. SMITH. That has nothing to do with it. The structures come afterward. There may not be a dollar spent by the Federal Government on the structures. Does that answer your question?

Senator ELLENDER. That is right.

Mr. SMITH. And it has to be approved by the United States Beach Erosion Board before and Federal money could be spent, anyway.

FEDERAL SHARE OF CONSTRUCTION COSTS

Senator ELLENDER. As I understand, under the present laws the Government could not spend more than a third of the amount of construction at any rate.

Mr. SMITH. That is right. But that is where the action affects public property. We are not asking for that. We are asking for these studies in order that the money may not be wasted in a useless way. If I may just take a moment to illustrate the point that comes home very forcefully to me. I happen to be in the banking business. In our bank we are asked to put up a big mortgage on an industrial plant. It was a little larger than we could share. I asked a financial institution that I am a director of in New York, and they agreed. We thought it was a good loan. One of the directors in this organization happens to be one of the greatest foundation experts in the country. He said, "I would like my firm to investigate this thoroughly," and he did.

He came back and he said their plans are faulty. He said, "The plant may stand up and it may not. If they would change their plans, if they had had expert advice, it would stand up. It would be all right."

That is exactly what goes on, and, of course, we could not go through with the loan. But that is what goes on now in these beach-erosion problems. Here is this United States Beach Erosion Board that has an excellent knowledge of the elements and forces that work by the ocean and the storms that we do not have that no State could have. So all we are asking for is money to be appropriated where the communities will join with the United States Beach Erosion Board in making these studies, so money will not be wasted and we can preserve our beaches.

Senator ELLENDER. My State is plagued with the same trouble—Louisiana, you know. We had some marvelous islands down there. Lost Island, Grand Isle, and we are troubled. We need that kind of study also.

Mr. SMITH. Now you do. I know that.

Senator ELLENDER. I have been advocating it right along, so I am one of your partners in that.

Mr. SMITH. Thank you very much, Senator.

CALIFORNIA STUDIES

At the present time there are studies being made in California. They have had four cooperative studies. And Ohio. But there is a great backlog of requests. We were fortunate to get $75,000 last year, and for 2 or 3 years we did not get anything.

Senator ELLENDER. It is money well spent.

Mr. SMITH. Thank you. We believe so.

Senator DWORSHAK. Does that complete your statement?

Mr. SMITH. Unless you want to ask any questions.

Senator DWORSHAK. No, thank you.

Mr. SMITH. Thank you very much, gentlemen, for your courtesy in letting me appear out of turn.

Senator DWORSHAK. Without objection, we will put your letter into the record at this point.

(The letter referred to follows:)

AMERICAN SHORE AND BEACH PRESERVATION ASSOCIATION,
Newark, N. J., May 22, 1953.

To the SENATE APPROPRIATIONS COMMITTEE,
United States Senate, Washington, D. C.

GENTLEMEN: On May 28, 1952, the American Shore and Beach Preservation Association during its annual convention at Atlantic City adopted a resolution petitioning the Senate Appropriations Committee to favorably consider a Senate subcommittee report on an amendment to the civil-works bill which would provide $100,000 for cooperative beach erosion studies with political subdivisions.

The Senate favorably considered the amendment and provided $75,000 in the civil-works bill for which the affected communities were very grateful.

At the present time we are petitioning you again for at least $100,000 amount to be included in this year's civil-works bill to continue these cooperative beach erosion studies with political subdivisions. The reason for asking at least $100,000 is because for several years prior to last year no moneys were appropriated for these cooperative studies. The results are that there is quite a backlog of requests.

These studies are urgently needed in many places in order to devise ways and means to protect and prevent our valuable shore properties continuously being threatened by destruction along the shores of the oceans, gulfs, and Great Lakes.

These studies, if they continue, will result in a saving of vitally important shore properties and will, in fact, serve long-term national economy, saving these assets for the use of the general public. The work of the United States Beach Erosion Board, which has been in progress for the past few years, is just beginning to bear fruit, so to speak, and to hamper the continuation of these cooperative studies with political subdivisions would not be a progressive step.

As you gentlemen probably know, beaches throughout the United States, particularly along the Atlantic coastline, Gulf coast, Pacific coast, and the Great Lakes are used by over 120 million people each year, but these beaches being constantly under attack by the forces of water need to be preserved and developed after methods of doing so are determined by cooperative studies with the Federal Government.

The public interest would, of course, be served by an appropriation to continue studies now under way with political subdivisions and also to start pending studies which have been applied for.

At the present time the States involved are New Hampshire, Massachusetts, Connecticut, New York, New Jersey, North Carolina, Florida, Texas, California, Wisconsin, Ohio, and the Territory of Hawaii. Millions of dollars have been wasted by well-intentioned people in building structures to protect their beaches or preserve them from the destructive forces of ocean storms. Those of us who have been actively engaged in this work and speaking personally, I have been the head of every commission in the State of New Jersey, which has been responsible for the preservation and development of our shore front. Since 1915 we were doing the best we could without the intimate knowledge of the facts. We appreciated how little we knew regarding the forces of nature which were damaging our shore fronts.

As a result of a conference called by our Governor at that time, A. Harry Moore, who requested the governors of the Coastal States to send delegates to a meeting held in Asbury Park for the purpose of exchanging thoughts and ideas concerning the various experiences we had in endeavoring to protect our shore fronts, we were unanimous in thinking that we should have some Federal body who should have the means placed at their disposal to study the problems involved, with the hope that they could come up with the answers.

In order to carry on the educational work that was necessary, the American Shore and Beach Preservation Association was organized in 1926. I have had the honor of serving as president since that time. As a result of the presentation of the facts that we could place before the Congress, bills were passed authorizing the creation of a board known as the United States Beach Erosion Board within the Corps of Engineers. The corps, in conjunction with the cooperating State agencies has succeeded through their studies in being able to advise these communities what they should do and where their advice has been followed, the shores have been protected.

Speaking out of my years of experience, I cannot emphasize too strongly the tremendous value the United States Beach Erosion Board has been to those of us who are charged with the responsibility of preserving and protecting our shores.

Accompanying this statement are extracts from the magazine of the association known as Shore and Beach which have a bearing on this subject. Also a bulletin issued by the United States Beach Erosion Board dated April 1, 1953, which speaks for itself. I am sure if inquiries were made of the Beach Erosion Board that you would find that inquiries have been received from States other than those mentioned in the report.

Respectfully submitted.

J. SPENCER SMITH.

Senator DWORSHAK. Is Mr. Lloyd Harvey here?

THE PORT OF NEW YORK AUTHORITY, NEW YORK, N. Y.

STATEMENT OF LLOYD HARVEY, MANAGER, WASHINGTON TRADE PROMOTION OFFICE

GENERAL STATEMENT

Mr. HARVEY. I have submitted statements in connection with the facts pertaining to the New York State Canal and the New Jersey-New York Channel, two very important industrial waterways to the port of New York and the State of New York, and vital to defense. I say "vital to defense" because during World War II, Gen. Brehon Somervell reported following the war that the No. 2 line of defense was the port of New York in that half of all the Army's shipped goods and personnel to foreign shores moved from the port of New York and one-third of all of the supplies.

INDUSTRIAL VALUE OF CHANNELS

The industrial value of these channels, canal and the channel, if the canal is completed there is a million and a half dollars that was previously appropriated just prior to World War II, which would have permitted the lowering of the lock sills in the canal which would have guaranteed an increase of 500,000 more tons of Great Lakes-New York tonnage, thereby returning to the Federal Government that much more in taxes.

The industrial value of the Arthur Kill Channel: $34 million has been invested there by the Federal Government, but the industries have invested $50 million in industrial facilities and a million and a half dollars to develop the port facilities.

TAXES COLLECTED BY GOVERNMENT

These two projects are most important to the New York port for the reason that we feel we know the economy has caused the Budget Bureau to cut $1,900,000 that was originally contained in the bill for the Arthur Kill Channel. That has been eliminated. They call that economy. We don't agree for this reason: That the State of New York contributed in 1952 over $12.5 million in taxes returned to the Federal Government. That, gentlemen, is 20 percent of the total return to the Federal Government.

The other State we represent, which is New Jersey, contributed 3 percent. All told, the two States contributed to the Federal Government in income taxes, tax returns, $23 million. Customs and other shipping activities in the port of New York returned to the Federal Government $295 million. We are only asking for a few million each year to complete these two important projects that we have. I do not mention the return to the Federal Government, trying to use that as a leverage to get appropriations. We are trying to point out that it is not economy to spend $34 million for the Arthur Kill Channel and allow it to lie idle.

It is like a man building a house without a roof on it, and then moving on to build another house without a roof on it. He gets no return from his investment. The New York Canal, if we had the

sum of a million and a half dollars to permit the lowering of those lock sills, the Federal Government would get the return of those additional 500,000 tons. We believe that world war III, if it comes, and we hope it does not come—I was in World War I and had two sons in World War II, as many of you gentlemen have—but if world war III comes, it may be wishful thinking to believe that Europe will be our first line of defense. Our feeling is that the Atlantic coast and Gulf coast will be the first line of defense.

These returns from our State finance many projects that would not be possible in other States, Idaho, Pennsylvania, Louisiana, any State you want to name in this Nation, without those $12.5 million each year, we would have to make further cuts. I mention those things because we believe some of those Federal returns should be used to set up our defenses along the Atlantic, Gulf, and Pacific coasts. All harbor and navigation should receive, I think, first attention.

REQUEST FOR FUNDS

I just want to briefly summarize, and that is all I had to offer. I would like to respectfully urge that you gentlemen give careful consideration to this recommendation that we have reinstatement of the $1.9 million that was originally contained in the budget, that we have an authorization to start preliminary work on the B. & O. bridge. It is an obsolete bridge built in 1888. It costs today $300,000 in accidents and damages which actually is costing the Federal Government because that money would normally be additional money that would be used in the return to the Government.

Also, the authorization for the million and a half dollars which will complete the lowering of the lock sills in the New York Canal thereby allowing the additional tonnage to move without additional vessels.

With the draft today, the depth now is not sufficient so that the vessels have to run light through the canal in order to handle the cargo.

That is all I have, gentlemen.

Senator DWORSHAK. Does that cover both of your statements, sir?

Mr. HARVEY. Yes, sir. I have other gentlemen with me.

Senator DWORSHAK. Do you want these placed in the record?

Mr. HARVEY. Yes, sir. I gave the reporter copies of both.

(Mr. Harvey's prepared statement follows:)

STATEMENT BY LLOYD L. HARVEY, MANAGER, WASHINGTON TRADE PROMOTION OFFICE, THE PORT OF NEW YORK AUTHORITY ON GREAT LAKES TO HUDSON RIVER WATERWAY (NEW YORK STATE CANAL SYSTEM)

The Port of New York Authority is an agency of the States of New York and New Jersey created in 1921 to develop the facilities and promote the commerce of New York Harbor.

The New York State Canal system (Great Lakes to Hudson River Waterway) is an important link in the transportation service of the port of New York and to industries on or near ports on the Great Lakes. A severe limitation in the tonnage carried through this waterway presently exists due to the fact that work approved by the United States Army engineers has not been completed.

Last year traffic on the New York State Canal, which is of vital importance to the economy and business interests of the State of New York, reached an alltime high record of 5,211,472 tons and consisted principally of such essential commodities as petroleum, heavy chemicals and grain. While most of the grain went to western European countries and Great Britain, practically all of the petroleum and chemicals were shipped from New York and New Jersey plants to factories and industries engaged in war or national emergency work.

We are deeply concerned with the extremely slow progress of the Federal improvement of the New York State Canal between the Hudson River and Lake Ontario which was initiated in 1935. This project, authorized under the Emergency Relief Act and River and Harbor Act of 1935, provides for the allotment of Federal funds to the State of New York, for expenditure under suitable Federal control and supervision, for the deepening and widening of that section of the State Canal between the Hudson River and Oswego, as well as the raising of bridges to permit an overhead clearance of 20 feet.

To date, approximately $22 million has been spent out of the original authorization for $27 million. While shippers and operators have been patiently awaiting completion of the entire program which was interrupted by World War II, they are now urging that the lowering of the lock sills be progressed as soon as possible. One foot additional draft over the lock sills will permit a greater loading of present barge equipment navigating the State barge canal system. All that remains to be done to make this Federal improvement program effective is to lower the lock sills at a cost of approximately $1,500,000.

During the last war, the State barge canal was extensively used for the movement of emergency traffic, particularly petroleum liquids from oil refineries in New York Harbor to up-State industrial and residential areas. In the event that the present emergency continues to develop, it is reasonable to expect that the New York State barge canal system will again be used extensively for the shipment of vital commodities.

Although this work has been underway since 1935, and is 75 percent complete, operators of motorship and barge services have derived little benefit from the improvements as all of the bridges have not been raised to a maximum of 20 feet above the canal, and which under the most favorable circumstances cannot be completed for several years more.

However, one of the most important phases of the Federal program and which can provide immediate benefits to motorship and barge operators, is the authorized lowering of the lock sills an additional 1 foot, which is estimated will cost $1½ million. The lowering of the lock sills can be completed without difficulty during the winter months of 1953–54 when the canal is closed for navigation. The greater depth of 1 foot over the lock sills will permit the transportation of an additional 500,000 tons of freight each season by the present fleet of motorships and barges. This added tonnage is the equivalent of 17,000 carloads of traffic and the increased revenue to the carriers that would result from the greater loading capacity is estimated at not less than $2 million a season.

When considered from the standpoint of national emergency, the deepening of the lock sills is of great urgency because of the possibility of moving a larger volume of traffic on the New York State Canal at a minimum expenditure of funds as indicated in the following analysis:

1. Last year there moved on the New York State barge canal 5,211,472 tons of cargo, consisting of petroleum, grain, scrap iron, molasses, etc., of which 75 percent was petroleum products.

2. That on an expenditure of $1,500,000 the canal sills could be lowered and finished during the closed season 1953–54 if the appropriation is made by the present Congress.

3. That the sum of $1,500,000 is only the cost of 2½ modern tug and barge units of 20,000 barrels each.

4. That the steel for this project for reinforcing locks and the canal gates will only amount to 350 tons of steel. This quantity of steel is less than the steel required to build one 20,000-barrel oil barge.

The Department of Public Works of the State of New York is prepared to undertake and complete the lowering of the lock sills so that the operators of motorships and barge services can receive immediate and direct benefits from the Federal expenditures during the 1954 season and each year thereafter. Therefore, it is urged that the funds for this work be appropriated without further delay, thereby completing this project and permitting a return to the Federal Government of dividends on this public investment.

STATEMENT BY LLOYD L. HARVEY, MANAGER, WASHINGTON TRADE PROMOTION OFFICE, THE PORT OF NEW YORK AUTHORITY, ON NEW YORK-NEW JERSEY CHANNEL

The Port of New York Authority is an agency of the States of New York and New Jersey, created in 1921 to develop the facilities and promote the commerce of New York Harbor. In the promotion of port commerce, it is of paramount

importance that channels of adequate depth be available for the safe handling of the thousands of ocean vessels that enter this harbor.

In 1952 approximately 9,000 vessels loaded or discharged 31 million tons of cargo in New York Harbor. The port of New York handles approximately 18 percent of the oceanborne volume and 31 percent of the value of the foreign commerce of the United States, and its contribution to the Federal Government from its customs and shipping activities in 1952 exceeded $295 million.

The New York-New Jersey Channel is one of the most important in this port and extends from the lower bay to the upper New York Bay for a distance of approximately 30 miles, separating Staten Island from the State of New Jersey.

The lower section, extending through Raritan Bay, thence northerly through the Arthur Kill to a point opposite Smith Creek, has an authorized depth of 35 feet. The northern section of this channel from Piles Creek in the Arthur Kill and Kill van Kull to the upper bay also has a minimum depth of 35 feet. The 6-mile middle section of this important channel, however, between Smith Creek and Piles Creek, only has a depth of 30 feet.

This section of the New York-New Jersey Channel serves one of the most important industrial areas in New York Harbor. It carries a tremendous volume of local and ocean traffic, which for the year 1951 amounted to 73,000,000 tons. These industries included many important national firms engaged in the manufacture of chemicals, processing of ores, refining of gasoline and oils, as well as the storage and distribution of coal and lumber. Among the more important of these firms are the American Smelting & Refining Co., Shell Oil Co., Barber Asphalt Co., Gulf Refining Co., the Texas Co., and Tidewater Associated Oil Co.

Everyone of these industries is vital to national defense and deepening of this channel is necessary for the delivery and shipment of their products.

The Army engineers report that private interests have already spent over $50 million for plant and terminal facilities and more than $1½ million for navigation improvements in this area.

The authorized 35-foot depth is designed to accommodate the largest freight vessels and tankers now in use and which have a loaded draft of 32 feet. Hence such vesels cannot serve industries located on the 30-foot channel still to be dredged. This has been the cause of bitter complaints from these industries which have already waited many years for the deeper channel.

All of these industries, however, are badly handicapped because of the inadequate depth in the Arthur Kill section of this channel. Although a 35-foot depth has been authorized throughout itse length, such a depth is only available for a short distance at the north and south entrances to the Arthur Kill section.

Modern deep-sea tankers and bulk-cargo vessels require a minimum channel depth of 35 feet, and this was the justification advanced by Congress in its authorization for the greater depth. The Texas ports at which these vessels load have had channels of 40-foot depth for some time. However, these same tankers are compelled to discharge part of their cargo at anchorages in New York Harbor before they can proceed to their terminals on the Arthur Kill to complete their unloading.

In addition to the limited channel depth, navigation at the north entrance is severely handicapped by the bridge of the Baltimore & Ohio Railroad immediately north of the Goethals Bridge. This bridge with its antiquated structure, supporting piers, and long fender system in the center of the channel, as well as its close proximity to sharp reverse bends in the channel, along with varying currents at this point, renders navigation extremely difficult. Accordingly, on July 5, 1949, the Baltimore & Ohio Railroad was ordered under the provisions of an act of Congress, June 21, 1940, Public Law 647, 76th Congress (the Truman-Hobbs Act), to alter and reconstruct the bridge, as an unreasonable obstruction to navigation. Preliminary plans and specifications for the proposed alterations have been prepared and submitted to the Office of the Chief of United States Army Engineers. The reconstruction of this bridge now awaits the necessary appropriation of funds by Congress in accordance with the Truman-Hobbs Act.

This bridge seriously restricts navigation on the Arthur Kill and imposes heavy penalties on the operators of vessels navigating that section of the New York-New Jersey Channel. One of the large industrial firms, whose terminal facilities are located at Carteret, N. J., advises that although they have plans for increasing the facilities of their plant to handle a larger volume of production, they hesitate to do so because of the dangerous navigational hazards presented by this bridge.

Another industrial user estimates an additional expense of $45,000 was incurred last year in waiting time by his vessels because weather or tides made it dangerous to navigate the bridge opening.

The Sewaren, N. J., electric powerplant of the Public Service Co. is dependent on this channel for the delivery of fuel oil. This public utility supplies power to vital defense and commercial industries throughout that area of the State of New Jersey. However, loaded tankers are delayed many hours and have to discharge part of their cargoes at an anchorage before they can dock at this plant. The monetary loss in waiting time of tankers is estimated at several hundred thousand dollars a year, which expenditure would be avoided if the 35-foot depth was available.

This channnel also has added significance in its availability as a third entrance channel to New York Harbor, now dependent on the Ambrose Channel and the Long Island Sound-East River Channel, the latter of which was used very intensively during submarine activities of the last war. There is no doubt that the United States Navy would divert all of the deep-sea tanker traffic from the Ambrose Channel to the south entrance of the New York-New Jersey Channel during war emergency periods, if adequate depth was available throughout its length. During the last war, many of these tankers were compelled to discharge aviation and highly volatile gasoline at anchorages in the midst of other shipping within the harbor. This highly dangerous practice would have been avoided if an adequate depth had been available in the New York-New Jersey Channel to permit the loaded tankers to proceed directly to the refineries and oil terminals to discharge their cargoes.

This is the only important channel project in New York Harbor still to be completed. Approximately $21 million remains of the original authorization to deepen the New York-New Jersey Channel, and in view of its importance to shipping and industry, and to the National Government in the event of a war emergency, we request that not less than $5 million be appropriated this year and annually hereafter so as to complete the project within the next 5 years.

[From the New York Times, November 6, 1952]

"Ugly Ducklings" Ply Backwaters

CARGO CRAFT PUT STATEN ISLAND SOUND FIRST AMONG THE 49 CHANNELS IN THE HARBOR—OIL IS KING OF THE KILLS—LONG-DEBATED BORDER AREA IS SUFFERING GROWING PAINS—SAILING PROBLEMS LOOM

(By Richard F. Shepard)

The most beautiful ships in the world pass between the Battery and 59th Street in the Hudson River. But the "ugly ducklings" of commerce, for the most part, ply the backwashes of the harbor from Newtown Creek and the Gowanus Canal across the East River, Buttermilk Channel and Red Hook flats to the low marshes of the Jersey shore.

Hidden behind Staten Island is the busiest of the 49 waterways in the Nation's busiest harbor.

The 30-mile channel, officially called the New York-New Jersey Channel and locally Staten Island Sound, begins just west of Sandy Hook. It darts 8 miles through the bay, curls past Tottenville, and plunges into the crooked estuary that is the remainder of its path. Precariously balanced on the State line, it threads northward to Elizabeth through Arthur Kill, swings across Newark Bay, and around Shooters Island into the broad Kill van Kull. From there it pours eastward past the craggy heights of St. George, over Robbins Reef, and into the open water in the upper bay.

A DEBATE OF LONG YEARS

In 1609 the first ship arrived in Kill van Kull. Henry Hudson's tiny *Half Moon* poked through looking for a shortcut to the Orient. Finding only New Jersey, she withdrew to try again. In colonial days and later, possession of the strait became the subject of debate between the Dutch and English, and then New York and New Jersey.

The time was when all ships entering the harbor were supposed to clear at Manhattan first. The crown colony was miffed because many shippers smuggled

their goods through Perth Amboy. This illicit reduction of overhead lasted until 1702, but it was not until 1835 that the line was drawn in the middle of the stream.

Commercial fishing was one of the first industries on the kills. Thirty-six years ago the last nets were hauled in, but long before that, oysters from Mariners Harbor had ceased to be a delicacy. The Civil War had attracted more heavy industry to that area, and shipbuilding became a major item. There are still five such yards along the channel.

By World War I, new industries had moved in. Oil is king of the kills today. Also bulking large are sand and gravel concerns, a gypsum plant, fertilizer factories, modern powerhouses, chemical plants making items ranging from rat poison to vitamins, a tremendous coal yard, mills for processing the oils of fish, whales, and coconuts, and even a log pond for aging imported cedar and mahogany timbers.

Statistics highlight the importance of the kills both as a deep-sea and an inland waterway. In 1951, 64,846 vessels hauled cargo into the waterway. A total of 142,849 craft traded between the dozen ports or 138 piers on the kills. This business amounted to 73,404,674 tons, or 38 percent of the port's total commerce. Another 25,680,323 tons transited the kills, just passing through.

Private industry has spent $50 million in the development of its waterside property. A Government canalization project, 60 percent completed by the Army Corps of Engineers, still needs $21 million for finishing. The kills are suffering from growing pains.

THE PROBLEMS GROW, TOO

The big new supertankers, whose 600-foot length and broad beam dwarf the T-2's that were so impressive only 7 or 8 years ago, have brought new problems. The middle reach of the kill, between Smith and Piles Creeks, is only 30 feet deep, in contrast to the shipway's 35-foot depth through the remainder of the channel. In addition, a 60-year-old railroad bridge, 1 of 4 channel crossings, pivots on a midchannel heap of masonry, dividing the already narrow channel.

The engineers are completing an anchorage at Perth Amboy capable of holding three 32,000-ton ships. It also will hold, by March, four coastwise coal barges, part of the fleet of 300 that call daily at South Amboy. The engineers also plan soon to widen a sharp angle at Seguine Point, near Staten Island's southern tip, to ease the turns for the long ships.

A typical kills seaman is Capt. Ernest Prufer, a veteran of 37 years' experience, who now skippers a Socony-Vacuum tug. His tour of duty to and from the concern's plant at Port Socony may take him through the kills several times a day.

He can point out on the way such sites as the desolate pier that is called the Frenchman's. The Frenchman, it seems, was an early oil mogul who became so embittered against the Rockefeller interests that he stipulated in his will that his section of the Bayonne waterfront never fall into their hands. Captain Prufer remembers others events and landmarks, but best of all, he recalls the old days on the tugs, when almost everyone had a gold eagle and globe atop the pilothouse, and "growlers" of beer hung outside the engine room of every tug in the kills.

Life was different then.

CORPS OF ENGINEERS, UNITED STATES ARMY, OFFICE OF THE
DISTRICT ENGINEER, NEW YORK DISTRICT,
New York, N. Y., October 23, 1952.

THE STATEN ISLAND RAPID TRANSIT RAILWAY CO.,
Baltimore and Ohio Railroad Building,
Baltimore 1, Md.

GENTLEMEN: Reference is made to the plans and specifications submitted by you on 14 October 1949 for reconstruction of your bridge across Arthur Kill between Elizabeth, N. J., and Staten Island, N. Y., in compliance with the "Notice to alter bridge," dated July 6, 1949.

The plans and specifications have been carefully reviewed and are considered adequate to be classed as general plans and specifications within the intent of section 4 of the act of June 21, 1940. As such, the district engineer has been authorized to advise you that the plans and specifications are conditionally ap-

proved, subject to the submission of additional plans and specifications detailing the construction to be provided.

There are enclosed a copy of the plans and a copy of the specifications on which various errors and omissions are corrected in red. There is also inclosed a memorandum describing these errors and omissions and commenting on various phases of the reconstruction. It is recognized that the plans and specifications, as submitted, were general in nature, so that some of the comments refer to items which would normally be taken care of in the preparation of the detail plans and specifications. These corrections and comments are not made a condition to the approval, but are merely called to your attention for such action as may be necessary.

It is considered desirable that an understanding be reached as to preliminary apportionment of costs prior to approval of the detail plans and specifications. It is requested, therefore, that your proposed apportionment be submitted along with the detail plans and specifications. At the time of apportionment, the following items, among others, some of which are referred to in the enclosed memorandum, will be discussed as direct and special benefits:

(*a*) The type of structure of the lift span and the west approach span.
(*b*) The duplication of the standard drive for emergency drive.
(*c*) Tower elevators.
(*d*) Spacing of refuge bays.
(*e*) Top buffers on lift span.
(*f*) Top width of approach embankment.
(*g*) Steel construction on part of west approach.
(*h*) Extent of approaches.
(*i*) Size of pier bases in west approach.
(*j*) Center to center distance between old and new bridge.

Very truly yours,

A. H. DAVIDSON, Jr.,
Colonel, Corps of Engineers, District Engineer.

RESOLUTION OF THE STATEN ISLAND CHAMBER OF COMMERCE IN REGARD TO PORT OF NEW YORK IMPROVEMENTS, PARTICULARLY AS TO IMPROVEMENT OF ARTHUR KILL CHANNEL AT THE STATEN ISLAND RAPID TRANSIT RAILWAY CO. CROSSING BETWEEN ELIZABETH, N. J., AND STATEN ISLAND, N. Y.

Whereas on April 15, 1947, a hearing was held by the United States engineer, New York district, as to a complaint that the Staten Island Rapid Transit Co.'s drawbridge across Arthur Kill between Staten Island, N. Y., and Elizabeth, N. J., was an unreasonable obstruction to navigation, and thereafter under date of July 5, 1949, Secretary of the Army Gordon Gray issued an order requiring alteration of the railroad bridge as necessary to render navigation through or under said bridge reasonably free, easy, and unobstructed in accordance with provisions of the Truman-Hobbs Act; and

Whereas the Arthur Kill Channel carries about 30 percent of all waterborne commerce in the port of New York; and

Whereas prior to the United States engineer's hearing in 1947 there were 96 accidents caused by ships striking the bridge resulting in an average annual damage in excess of $34,000, and since such hearing these have been 2 major collisions resulting damage to the bridge of more than $183,000 and damage to vessels exceeding $85,000; and

Whereas petroleum products make up about 85 percent of the total cargo shipped through the Arthur Kill Channel, and super tankers in excess of 700 feet in length and with 100-foot beams now constitute more than 30 percent of the total tanker traffic, with further increases in size contemplated, rendering future collisions extremely hazardous due to the nature of the cargo; and

Whereas plans and specifications for the alteration of the Arthur Kill Bridge have been submitted to the United States engineer, New York district, on October 17, 1949, and such plans and specifications have been conditionally approved by the district engineer under date of October 23, 1952: Now, therefore, be it

Resolved, That the reconstruction of the Staten Island Rapid Transit Railway Co.'s bridge across Arthur Kill is essential to the commerce and industry of Staten Island, not only as now existent but for the future development and expansion of the Borough of Richmond, and is a matter of vital necessity to na-

tional defense as demonstrated by the tremendous flow of men and materials through this gateway to the State Island terminal of the New York Port of Embarkation; and be it further

Resolved, That the Congress of the United States should appropriate sufficient funds for the improvement of the Arthur Kill Channel and the alteration of the Staten Island Rapid Transit Railway Co.'s bridge across Arthur Kill between Staten Island, N. Y., and Elizabeth, N. J.

THE STATEN ISLAND CHAMBER OF COMMERCE,
[SEAL] FRANK MULERHILL, *President*.
Attest:

ART O. HEDQUIST, *Executive Secretary*.

Senator DWORSHAK. Before we hear other witnesses, the clerk informs me that Senator Hendrickson has submitted a statement which he wants read into the record, instead of inserting it. He requests that it be read so that the witnesses would know of his interest.

ARTHUR KILL PROJECT

STATEMENT OF HON. ROBERT C. HENDRICKSON, A UNITED STATES SENATOR FROM THE STATE OF NEW JERSEY

GENERAL STATEMENT

Mr. Chairman, I am deeply grateful for the opportunity to make this statement to you today on behalf of my fellow New Jerseymen who have come to Washington to speak in support of two projects now pending before your distinguished subcommittee. These projects relate to the construction of a new bridge across the Arthur Kill Channel to replace the obsolete Baltimore & Ohio bridge, and to deepen and widen the Arthur Kill Channel of the New York-New Jersey Channel.

Let me say, first, that I have talked with and corresponded with many interested parties from my home State and from our neighboring State of New York, as well, regarding these problems, and I wish to associate myself firmly with the detailed arguments they have prepared. Unfortunately, pressing commitments prevent my personal appearance here so that I might introduce these proponents first hand, but as I said, I have discussed the attendant situation with them and I am quite definitely here in spirit and in the substance of this very brief statement.

First and foremost in the minds of spokesmen such as Mr. Harold Loizeaux, chairman of the harbor and waterways committee of the Chamber of Commerce of Eastern Union County, N. J., and Adrian O. Murray, executive vice president of the same organization, is the replacement of the present Baltimore & Ohio bridge. It is my understanding that plans for the new bridge were completed in 1949, that the Department of the Army has approved construction under the Truman-Hobbs Act, and that release of funds for this undertaking are particularly vital in view of the hazards to navigation and the waste of thousands of dollars to companies engaged in vital defense activities in this area.

CONTINUATION OF CHANNEL-DEEPENING PROJECT

The channel-deepening project in the New York-New Jersey Channel has been progressing for some time in the best interests of com-

merce and the national defense. In my opinion it should also be continued—as has been recommended by the Army engineers—as a necessary operation in the most heavily traversed port in the world.

I now thank the distinguished chairman for his courtesy to me, and submit for the record one of the letters which I have received from important segments of local industry in this regard.

Senator DWORSHAK. The letter from the Loizeaux Builders Supply Co., of Elizabeth, N. J. will follow Senator Hendrickson's statement, and a brief list of names of persons who have likewise written letters concerning this subject.

(The letter referred to follows:)

LOIZEAUX BUILDERS SUPPLY CO.,
Elizabeth, N. J., May 20, 1953.

Hon. ROBERT C. HENDRICKSON,
Senate Office Building, Washington, D. C.

DEAR BOB: I understand there will be a hearing on Friday afternoon, May 22, before the Senate Appropriations Committee to consider appropriation of funds for the replacement of the present Baltimore & Ohio bridge across Arthur Kill, as well as the widening and deepening of the channel. I wrote you back in January about this matter and in your letter of February 10, you advised you had discussed this matter with Messrs. Harvey and Byrne, of the Port of New York Authority, and a program had been outlined, which you had approved, and hoped to bring this matter to a satisfactory conclusion.

I have been chairman of the harbor and waterways committee of the Chamber of Commerce of Eastern Union County for some years and in the last year we have been pushing to get this needed improvement completed. I believe you have the entire story in your file.

As you know, the plans for a new bridge were completed back in 1949, but the project has not gone ahead due to the fact that funds have not been appropriated. We feel this is an essential project. The present railroad bridge has a center pier which splits the channel in two. The size of the ships, particularly tankers, and the volume of traffic on this waterway has increased greatly since the single-track swing bridge was completed, I believe, in 1888. This makes navigation extremely difficult, but also very dangerous and the delays caused to shipping companies and industries run into thousands and thousands of dollars. While we appreciate the necessity for economy in Government, we do feel that such an essential project located on a vital waterway should receive priority. While we are heartily in favor of the deepening of the channel, particularly in the stretch south of Linden, we feel that it might be wise to concentrate at this time and proceed with the replacement of the bridge so that this most essential improvement could be accomplished as soon as possible.

I do hope that you can stress this point at the hearing and lend all of your aid toward getting funds appropriated and the work started. If you have any suggestions where I can be of any help, please let me know.

Your help and cooperation will be greatly appreciated.

Respectfully yours,

HAROLD.

Other letters received just recently on the same subject.

1. Fred J. Plattner, of General American Tank Storage Terminals of Carteret, N. J.
2. Mr. Adrian O. Murray, executive vice president, Chamber of Commerce of Eastern Union County, N. J.
3. Elmer Pontin, vice president, Pontin Lighterage & Transportation Corp.
4. Walter Gotham, vice president, Nuodex Products Co., Inc., Elizabeth, N. J.
5. Mr. E. G. Maddock, assistant manager, Cities Service Oil Co., New York, N. Y.
6. Mr. L. J. Coughlin, Bayway Terminal Corp., Elizabeth, N. J.

Senator DWORSHAK. Senator Ives has also submitted a statement on the New York-New Jersey Channel and the replacement of the Arthur Kill Bridge. His statement will be inserted at this point in the record.

(The statement referred to follows:)

STATEMENT OF SENATOR IRVING M. IVES IN RELATION TO APPROPRIATIONS OF FUNDS FOR THE NEW YORK-NEW JERSEY CHANNEL AND THE REPLACEMENT OF THE EXISTING RAILROAD BRIDGE OVER THE ARTHUR KILL CHANNEL

It is a pleasure to submit this statement to your distinguished group to urge appropriation of sufficient funds for the completion of the deepening of the New York-New Jersey Channel and the replacement of the existing railroad bridge over the Arthur Kill section of the channel.

A number of distinguished witnesses have appeared before you in support of these projects. Testimony has been presented dealing with their importance to vital defense and commercial industries, and to the Federal Government in the event of a war emergency.

I am informed that a 6-mile section of the New York-New Jersey Channel needs dredging to a depth of 35 feet. The present depth as it affects navigation is handicapping industries engaged in the manufacture of chemicals, processing of ores, refining of gasoline and oils, and the storage and distribution of coal and lumber. In view of the congestion and hazardous conditions which exist, I strongly urge the appropriation of the necessary funds to complete this vital project.

The replacement of the existing railroad bridge over the Arthur Kill would remove a serious hazard to navigation, which I understand affects about 30 percent of all waterborne commerce in the port of New York. Moreover it would be of great importance to the Army's Embarkation Center on Staten Island and in the transportation of petroleum fuel to industries which supply our Armed Forces.

I submit for the record the text of a letter received from the office of the Chief of Engineers presenting the background of this project.

MARCH 25, 1953.

Hon. IRVING M. IVES,
United States Senate,
Washington, D. C.

DEAR SENATOR IVES: Reference is made to your letter of March 10, 1953, requesting information relative to the replacement of the B. & O. Railroad bridge across the Arthur Kill Channel between Elizabeth, N. J., and Staten Island, N. Y. You inquire into the possibility of an immediate survey of the necessity and cost involved to proceed with the razing of the old bridge and the construction of the new one. In my reply of March 16, 1953, I advised that I would give you a complete report as soon as available information could be assembled.

A public hearing was held at New York, N. Y., on April 15, 1947, in conformity with the provisions of section 3 of the act of Congress (Truman-Hobbs) of June 21, 1940 (33 U. S. C. 511–523) to afford all interested parties an opportunity to be heard as to whether alteration of the Staten Island Rapid Transit Railway Co.'s railroad bridge across Arthur Kill between Elizabeth, N. J., and Staten Island, N. Y., is necessary to render navigation reasonably free, easy, and unobstructed. Based on the facts presented the Secretary of the Army found the bridge obstructive and on July 5, 1949, issued a notice to alter bridge which was served on the railway on July 26, 1949. The railway, in accordance with section 4 of the act which required the owner to submit plans and specifications within 90 days after service of the order, submitted plans and specifications for the alteration of the bridge. These plans and specifications were conditionally approved subject to the submission of additional plans and specifications detailing the construction to be provided.

Appropriations for the fiscal years 1950 through 1953 have not contained any funds that could be applied to the alteration of bridges over navigable waters. The present estimate of the United States share of the alteration of the Staten Island Rapid Transit Railway bridge over the Arthur Kill is $6 million. The Department is aware of the hazard presented by the existing bridge and is prepared to prosecute actively its alteration when funds are made available by Congress for that purpose.

I trust that this information is sufficient for your purpose, if not, please feel free to call upon me for any additional information that you may require.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, USA, Assistant Chief of Engineers for Civil Works.

Mr. HARVEY. Thank you very much, gentlemen. I will call the names of the witnesses I have with me.

Capt. Frank J. Knudsen, with the Cities Service Oil Corp.

CITIES SERVICE OIL CORP.

STATEMENT OF FRANK J. KNUDSEN, NORTH ARLINGTON CHIEF PILOT

GENERAL STATEMENT

Mr. KNUDSEN. Mr. Chairman and members of the committee, last year I piloted 297 large vessels through this portion of the Arthur Kill Channel that we are here talking to you about, in excess of smaller type vessels. We have in 1 section of the kills 6½ miles long, which was approved to be dredged and has never been completed.

The channel is only 400 feet wide, where you can find it, and about 30 feet deep, where you can find it. We are taking ships at present down the kills that are drawing in excess of 30 feet, up to 33 feet.

I have taken them down myself. We are having terrific difficulty in maneuvering the bends, meeting and passing other vessels in this section of the waterway.

As you can see, we have gone overboard taking deeper draft down than is there. You can't help but see that. It is 30 feet and we are taking 32 and 33 down. We have to wait for high water. That is the only way we can do it and the only practical way we can do it.

EFFECT OF CHANNEL IMPROVEMENT

If this dredging is completed, if this channel improvement is finished, it means a terrific saving not only to our company, but to other companies who are with us in this, where we can take a fully loaded ship on arrival at the port of New York, and proceed direct to the dock, with no delays waiting for tide or anything else. This is accomplished through your arrival time at your terminal, according to what the tide might be at the terminal. If it should happen to be an ebb tide, we would come in the south way, and if it should happen to be a floodtide, we would come in the north way, this being caused because the channel width, under this new appropriation or approved project, is only 500 feet. All ships that are plying these waters now, all these tanker vessels, are longer than 500 feet. There is no way we can turn around. We have to arrive at the right tidal conditions. We have two bad bends in this waterway, namely, the southwest corner of Proul's Island, and the other one is Tufts Point. These bends are very, very sharp. In fact, both of them are 90-degree turns. Taking a 525-foot ship, which is present-day, and the larger ships now under construction, around a 90-degree turn with the tide running is a job. We would like to see this dredged out so we can take these ships down with a maximum of safety as compared to what we have now. We have no safety factor whatsoever. We are meeting and passing vessels at all times. To meet and pass a vessel at these turns is practically impossible. One of them has to hold back, and if they don't there is trouble.

We are running ships now, the T–2 size in our own fleet, which is the size owned by the Cities Service Oil Co., and we have 4 larger

ships which will enter our service this next year, 1954, which are in excess of 700 feet, with a beam of 97 feet, and a draft of 37 feet 6 inches.

At the present it is impossible to take these ships to our terminal. They have to be taken to some other terminal belonging to the company, and we can't bring them into our New York terminal though we would like to.

Senator HOLLAND. You mean you partially discharge them someplace else and bring them in?

Mr. KNUDSEN. With the present conditions as they are, you couldn't take the ship down because of her length, these new ships. They are too long to make these bends. With this approved project completed, these ships would be able, under good conditions, to proceed to the dock.

PROJECT PARTIALLY COMPLETE

Senator ELLENDER. How much work has already been done on this project?

Mr. KNUDSEN. On the project? The whole Arthur Kills has been dredged with the exception of a 6½ mile stretch from Piles Creek to Warren, N. J.

Senator ELLENDER. Six and a half miles more?

Mr. KNUDSEN. That is correct. In the approved project they have cut off the corner of Proul's Island and also the corner of Tufts Point to improve conditions.

COMPLETION COSTS

Senator ELLENDER. Do you know how much it would require to complete 6½ miles?

Mr. KNUDSEN. As far as I am able to find out it would cost $21 million.

Senator ELLENDER. $21 million?

Mr. KNUDSEN. That is what the Army engineers estimate.

Senator ELLENDER. That is quite an amount of money.

Mr. KNUDSEN. It is a lot of money. But they claim it will take 5 years to dredge.

Senator ELLENDER. How much has already been spent?

Mr. HARVEY. $34 million. Both of these projects were authorized back in 1935.

Senator HOLLAND. $35 million. In fact, $35,797,000 is shown on the sheet.

Mr. HARVEY. The 6 miles, Senator Ellender, is a piece of the channel that is right in the middle of the entire channel, so that a ship cannot navigate from north to south, because of the 30-foot depth right in the center of the channel, the center stretch of the channel. It is 35 feet to the south of it and 35 feet to the north.

Mr. KNUDSEN. I have a map here, if you would care to see it. If we could get this project credited from a defense standpoint, you will have a third entrance to New York Harbor. Should the narrows or Ambrose Channel be blocked, you could take almost all vessels, through Raritan Bay through Arthur Kills and into New York Harbor.

Senator ELLENDER. When you speak of Arthur Kills, you mean the New York-New Jersey Channel; is that right?

Mr. KNUDSEN. That is correct, yes.

Senator ELLENDER. That is what was confusing me.

ORIGINAL REQUEST

Senator DWORSHAK. That is what the original budget asked for, this $1,900,000?

Mr. HARVEY. Yes, sir.

Senator DWORSHAK. There is nothing in the revised budget.

Mr. HARVEY. No, sir.

Mr. KNUDSEN. We feel we would like to have this channel dredged if it is at all possible. I would like to have this letter entered into the record. It is from Cities Service Oil Co., and it is authorized by Sinclair.

Senator DWORSHAK. Without objection it may be inserted into the record.

(The letter referred to follows:)

CITIES SERVICE OIL CO.,
New York, N. Y., May 18, 1953.

Hon. WM. F. KNOWLAND,
Chairman of the Subcommittee on Army Civil Functions,
Senate Appropriations Committee,
The United States Senate, Washington, D. C.

SIR: Cities Service Oil Co., which operates a refinery and petroleum storage facilities on the Arthur Kill at Linden, N. J., and operates a fleet of 18 owned T–2 and T–3 tankers and 5 chartered tankers which total 380,000 deadweight tons, all of which call at Linden from time to time, submits the following statement in support of the completion of improvements to the New York-New Jersey waterway project which has been previously recommended by the Army engineers.

The portion of this Arthur Kill channel extending from Sewaren, N. J. to Bayway, N. J. has a present depth of 30 feet and contains at least two very sharp bends. This channel is not adequate for the present T–2 size tankers except during certain favorable stages of the tide and in places is completely inadequate for loaded T–2 tankers. This portion of the channel is completely inadequate for the so-called supertankers of 25,000 to 32,000 deadweight tons—many of which have been constructed since the end of World War II and which will undoubtedly become the popular size vessel for petroleum transportation in the immediate future.

The petroleum facilities in this area have grown rapidly in the past few years and with the constant increase in the use of petroleum and its products, there is every reason to believe that this growth will continue. In the event of war, these refineries and petroleum storage plants will be an integral part of our facilities for national defense and in our opinion proper access to them is a "must."

As the trend in the construction of tankers is toward larger vessels and as the trend in naval tankers is toward larger and faster ships, the recommended channel providing a 35 feet minimum depth and 500 feet width should in our opinion be built as soon as possible. Such a channel would permit all but the very largest tankers to proceed to their loading and discharging berths at any time without the necessity of awaiting for favorable tides or lightering.

This is especially important in times of war when anchorage facilities are at a premium and lightering of petroleum products is at best a dangerous undertaking. As our vessels get larger, the cost of delays become more serious from a monetary standpoint and if full advantage is to be taken of these large ships, the channels to our docks must be such that the vessels can proceed without delay.

The Sinclair Refining Co., which operates a storage plant for petroleum products adjacent to our facilities at Linden, and who have recently completed the construction of two 25,000 deadweight tons tankers, have authorized us to state that they join us in the above comments.

Very truly yours,

CITIES SERVICE OIL CO.,
E. G. MADDOCK,
Assistant Manager.

Senator HOLLAND. Does each of those companies have a refinery?

Mr. KNUDSEN. Sinclair does not have a refinery. They have a storage plant. Cities Service has a refinery.

Senator DWORSHAK. Thank you.

Mr. KNUDSEN. Thank you, gentlemen.

Senator DWORSHAK. Is Mr. Adrian Murray here? Does he care to make a brief statement?

Mr. HARVEY. I was going to suggest that Captain Howell, Dalzell Towing Co., appear before Mr. Murray to follow Captain Knudsen in connection with the fire hazard.

DALZELL TOWING CO., NEW YORK, N. Y.

STATEMENT OF A. C. HOWELL

GENERAL STATEMENT

Mr. HOWELL. We generally stand. We don't see through the mast and so on. I can talk better. I am the oldest, I am sorry to say, active pilot in the port of New York. I have held a license since 1904.

In 1899 I was running to Europe. I am still active. I can handle most of the young fellows today.

When I started in, I took 12 foot of draft down the inside way through the waters that you are talking about. People said I couldn't do it, but I did it. The remark was made if the young fool knew anything, he wouldn't try it. I have seen them grow. The channel has changed. Now we have spots where it is supposed to be 30 foot of 27 foot 6 inches. It would be good if we could have this hole, as we call it, Staten Island Sound, all the waters back of the island to Jersey, dredged to at least a 600-foot width channel, 35 feet at low water, 40 would be better because most of your oil ports south, where these ships load, have a 40-foot channel, and wider. It is only 400 feet now.

I came up the bay one day from Gravesend Bay with one of the *Queens* just before dark, during World War II, or before daylight. I couldn't get up through the fleet anchored off Staten Island off the Narrows. I had to wait until daylight, when the tide swung. If these ships could continue through there near Sandy Hook, up to the south end and go through, you would save a lot of worry. You have 49 oil berths in that water in back of Staten Island there, in Staten Island Sound. If you could continue that way, and have water enough, and give us room to turn the ship around, the ships would never need to wait. Today the last ship I had down there, the big one, was 630 feet long, the *Atlantic Navigator*, with an 80-foot beam.

Those ships, the designers of them, they did not have to pilot them. If they did, they would give us a little more help. They haven't got 30-percent backing power. You can't stop them in an emergency, unless you are going along easy. You can't turn them around. You haven't got room. You can't anchor them if you get caught in a fire. I had one a while ago, and the rate I had, I had to keep going. I went through the B. & O. bridge and didn't know I was in it.

OIL FIRES AT SEA

Senator ELLENDER. It must have been a weak bridge.

Mr. HOWELL. Through the draw, rather. It is a pretty old bridge. Some vessels try to go through it. Here is the point: None of these fellows have stressed it but I have. I have seen a fire at sea. Did any of you ever see an oil fire at sea? Don't. I have read in the Good Book about the fires of hell. If it is like that, like an oil fire on the water, I want to be a good boy and go to heaven. One of the proofs is every pier in New York where it got a good start, has gone flat. We haven't saved one.. Why? Because every pile is impregnated with the drift oil on the water. They can't put them out. In all the kills there are only two piers of concrete construction, and that is the new California Oil & Bayway. You saw the fire there at the Gulf dock at Bayonne. We fought it for 4 hours. We built a wall of foamite in the water and kept it backed up with tugs, with other streams. Had it started down the kills, every dock in the kills would have been gone. A fire on water travels like a flash, that oil.

NEED FOR WIDER CHANNEL

You can't protect it, you can't stop it. You haven't given us room to turn a ship around, we can't stop, we have to keep going. It is an awful feeling when you have a big ship like that. They only have 1 foot of water under them. A ship close to the bottom gets very stubborn. She don't steer, she don't want to stop, she don't want to go where you want her to. You lean over trying to turn to the left. You pray to God she will and sometimes you pray them around. We have good rudders today; the ships steer well. But these ships are growing; they are always bigger than the channels. But if you can give us 600 feet of channel width, 35 feet deep, at low water, we have a chance. At 600 feet with the indentations into the docks, off the main channel where the private industry has dug into their berths, you have room to turn. Otherwise you can't turn the ship. But this fire hazard, God has been good to us. One of those 600-foot ships, if she ever catches fire forward with a stern with no steerage, she is going to go in half. Those frames will be filled with oil. She will burn out the kills. You have all-important oil refineries. You have spent 34 million; they are asking for 5, I believe. I have worked since I was a boy with the Army engineers, and I don't think there is a finer group of men in the world than they are. Those birds know what they are doing. When they have anything important, they call us fellows of the old-timers up and say, "What do you think about it?" We hold a public meeting. If you gentlemen can listen to those Army engineers, they are not looking for money to throw away. They are doing something good. I think that covers all I can say, sir.

Senaor DWORSHAK. Thank you, Captain.

The next witness?

ARTHUR KILL PROJECT

STATEMENT OF ADRIAN O. MURRAY, EXECUTIVE VICE PRESIDENT, CHAMBER OF COMMERCE, EASTERN UNION COUNTY, N. J.

GENERAL STATEMENT

Mr. MURRAY. Mr. Chairman and gentlemen, my name is Adrian O. Murray, executive vice president of the Chamber of Commerce of Union County. As you know, the Arthur Kill is the separating body of water between the State of New Jersey and Staten Island. A great many important industries are now lining that channel. We are constantly receiving complaints from these industries regarding their inability to navigate properly and safely and economically up and down the channel. We have been requested repeatedly to try to secure the replacement of the B. & O. bridge, which is evidently a great hazard in the channel, which has been mentioned by these gentlemen before.

NEED FOR CHANNEL IMPROVEMENT

It is also necessary, we find, to widen and deepen that channel in order to provide for the ever enlarging size of the boats that industry is providing and probably will use in the very near future. The chamber of commerce that I happen to represent covers 15 municipalities in Union County which is the major portion of Union County, the city of Elizabeth being the largest city.

It has also been, according to the recent survey published in August, the fastest growing county industrially any place in the New York metropolitan area. That covers New York, Connecticut, and New Jersey. So we are a highly industrialized area and a very important factor in the New York metropolitan district. We ask your very serious consideration to the elimination of this bridge and to the widening and deepening of this channel, because we feel, and I am sure you feel also, that it is really a very important channel and should be taken into consideration. Action should be taken immediately in order to remove these hazards.

Thank you very much.

Senator DWORSHAK. Thank you.

Mr. HARVEY. Mr. Mitchell, an engineer from the B. & O. Railroad, our last witness.

BALTIMORE & OHIO RAILROAD, NEW YORK, N. Y.

STATEMENT OF ALEX MITCHELL, ENGINEER

GENERAL STATEMENT

Mr. MITCHELL. At the original hearing on the Arthur Kill Bridge, a statement of accidents occurring in the previous 25 years was introduced. Since that time there have been 22 additional accidents. This is a statement containing those.

(The statement referred to follows:)

SUPPLEMENTAL STATEMENT TO EXHIBIT B

STATEMENT SHOWING MARINE ACCIDENTS AT ARTHUR KILL BRIDGE, STATEN ISLAND CROSSING (FROM RECORDS OF B. & O. RAILROAD CO.)

March 19, 1946: Reading tugs *Bern* and *Tice* and tug *Magnetic*. Struck southeast corner of center pier.

February 7, 1947: Red Star Line tug *Cree*. Struck bridge.

June 19, 1947: Tanker *George Whitlock*. Struck bridgettruss No. 1.

November 11, 1947: S. S. *Cayuse* assisted by two Dalzell tugs. Struck a George W. Rogers Construction Corp. derrick boat anchored south side of east fixed span of bridge, driving derrick boat into the span, A-frame on derrick boat striking truss and knocking span from its masonry into the Arthur Kill.

February 6, 1948: Tanker *Gulftravel*. Hit center pier.

June 7, 1948: Tug *Dauntless No. 15*. Hit south end of rack, pier No. 2.

October 12, 1948: Ampac *Washington*. Hit center fender.

December 9, 1948: Tug *Manhattan*. Broke mast and smokestack.

January 2, 1949: Pennsylvania Railroad Tugs *Baltimore* and *Cleveland*. Hit center fender.

December 23, 1949: Tug *Mexpet* and Tanker *David Green*. Rubbed side of pier.

January 14, 1950: Tug *Canal Cities*. Hit Staten Island pier rack.

November 2, 1950: Tug *Spring Creek*. Struck center pier head-on.

November 25, 1950: Department of sanitation tug. Hit work platform, center pier.

December 3, 1950: Tug *Ferry Point*. Hit Staten Island rack.

March 30, 1951: Tanker *Margaret Matton*. Struck center pier fender.

April 2, 1951: Tug *Coppedge*. Boom struck center span.

May 18, 1951: Tugs *Amboy* and *Linden*. Struck fender center pier.

January 17, 1952: Tug *Patience*. Struck center pier fender.

November 21, 1952: Tanker *J. A. Cummings*. Knocked off fore and aft mast of tanker.

December 16, 1952: Tug *Sampson*. Broke boom of oil barge.

March 20, 1953: Tug *St. Vincent*. Boom struck bridge.

April 13, 1953: Tug *Fresh Kills*. Struck center pier fender.

Mr. MITCHELL. Under date of May 8, 1953, our chief engineer, Mr. A. C. Clarke, wrote to Mr. Murray reviewing the Arthur Kills Bridge matter, and giving the fullest details of what has occurred there. I would like permission to place this letter into the record.

Senator DWORSHAK. Without objection, that will be inserted.

(The letter referred to follows:)

THE STATEN ISLAND RAPID TRANSIT RAILWAY CO.,
Baltimore, Md., May 8, 1953.

Mr. ADRIAN O. MURRAY,
Executive Vice President,
Union County Chamber of Commerce, Elizabeth, N. J.

DEAR MR. MURRAY: In the matter of our Staten Island Rapid Transit Railway crossing over the Arthur Kill, the facts are as follows:

By order issued July 5, 1949, the railway company was directed by Mr. Gordon Gray, former Secretary of the Army, to make alterations to our bridge as necessary to render navigation through or under it reasonably free, easy, and unobstructed, pursuant to the provisions of section 3 of the act of Congress of June 21, 1940.

Under date of July 26, 1949, notice was addressed to and served on the railway company at New York by W. W. Wanamaker, colonel, Corps of Engineers, district engineer. This notice directed the attention of the railway company to section 4 of the act requiring us within 90 days to prepare and submit to the Secretary general plans and specifications to provide for the alterations of the bridge in accordance with the order.

With the approval of Colonel Wanamaker, the railway company entered into contract for certain test borings and retained a firm of consulting engineers and subsequently completed the necessary general plans and specifications and an estimate of cost. These exhibits were submitted to Colonel Wanamaker

on October 14, 1949, in compliance with section 4 of the act. By letter addressed to me on October 20, 1949, Colonel Wanamaker acknowledged receipt of the general plans and specifications pursuant to the notice served on July 26, 1949.

We had no further advice in this matter until October 23, 1952, when Col. A. H. Davidson, Jr., district engineer, advised that the exhibits which we had submitted were considered adequate to be classed as general plans and specifications within the intent of section 4 of the act of June 21, 1940. Colonel Davidson thereupon conditionally approved the exhibits, subject to the submission of additional plans and specifications detailing the construction to be provided.

On November 5, 1952, we acknowledged Colonel Davidson's letter of October 23, 1952, and expressed it as our understanding that we were to proceed at once with the final plan and specification work. We said we would so arrange unless advised to the contrary. In the absence of any contrary advice we have gone ahead with the work and the final plans and specifications should be available in about 90 days from this date.

What with consultant's charges and fees, the test borings and its own engineering work, the railway company has spent or will have spent a substantial sum by the time the final plans and specifications are completed and about one-half of the expenditure was made nearly 4 years ago. But the financial item is very definitely a minor matter and completely subordinated by our desire to get something constructive done.

We have gone along with the ruling that our present bridge is an obstruction to navigation and should be rebuilt. We have complied with the terms of the order served upon us and have met the requirements of the act under which this order was issued. Until there is some final constructive action, however, we are for all practical purposes estopped from going ahead with certain of our own improvements which we think would definitely be for the benefit of railroad transportation to and from Staten Island.

Yours very truly,

A. C. CLARKE, *Chief Engineer.*

COST OF PLANS

Mr. MITCHELL. At the hearing we stated we were not opposed to reconstruction of the bridge, and of course, sir, that still stands. We have spent approximately $150,000 preparing plans for the proposed structure and are ready to proceed with the construction as soon as funds are made available.

Senator DWORSHAK. Does that complete your statement?

Mr. MITCHELL. Yes, sir; may I place my prepared statement in the record?

Senator DWORSHAK. Your statement will be inserted in the record.

(The statement referred to is as follows:)

MAY 22, 1953.

UNITED STATES SENATE APPROPRIATIONS COMMITTEE,
Washington, D. C.

GENTLEMEN: We deeply appreciate this opportunity to present the views of the industrial, commercial, and professional interests of New Jersey, and especially Union County.

The State of New Jersey and Union County, as you know, is separated from Staten Island, N. Y., by the Arthur Kill Channel. Sixty million tons of shipping use this channel annually which means that it is a very important waterway from the standpoint of commerce. From the standpoint of defense, in time of war, it is also extremely important as it is located in the New York metropolitan area and along the Atlantic coastline.

We all realize the hazard of the B. & O. railroad bridge which crosses this channel just below Elizabeth as it has a supporting bulkhead which not only does not run parallel with the banks of the channel, but is set at a very dangerous angle. This present railroad bridge constantly jeopardizes shipping and causes many accidents, as well as slowing up traffic to a very marked degree.

We understand that the Government engineers have recognized this unfortunate situation and have recommended the replacement of this bridge so that it will not continue as an obstruction and danger to shipping in this channel.

We have been advised that the B. & O. officials are willing and anxious to correct this situation and that plans and specifications have been prepared to replace the present bridge with a new span which would eliminate this particular hazard, since 1949.

According to a survey published in August 1952 by the Regional Plan Association, more new industrial plants have been built in Union County, N. J., than in any other of the 22 New York, New Jersey, and Connecticut counties in the metropolitan area. This was done on the basis of a 5-year study.

For these and other reasons it is hoped that your honorable body will recognize the importance of the Arthur Kill Channel from the standpoint of defense, as well as commerce. Serious damage and loss of valuable time is caused by the present conditions.

After the bridge construction has been corrected, immediate steps should then be taken to deepen and widen the channel to allow for easy shipping in this important waterway.

Many large and important industries now line the banks of the Arthur Kill, and more industries would locate here if shipping facilities were improved.

It is hoped that your honorable body will recognize the necessity for immediate action so that the necessary funds might be appropriated for this important project.

Respectfully submitted.

ADRIAN O. MURRAY,
Executive Vice President, Chamber of Commerce of Eastern Union County, Elizabeth, N. J.

Senator DWORSHAK. The committee has received a letter from Mr. C. P. Runyon, vice president of the Perth Amboy Dry Dock Co., which will be inserted in the record at this point.

(The letter referred to follows:)

PERTH AMBOY DRY DOCK CO.,
Perth Amboy, N. J., May 18, 1953.

Mr. WILLIAM F. KNOWLAND,
Chairman, Subcommittee Army Civil Functions, Senate Office Building, Washington, D. C.

DEAR MR. KNOWLAND: Thank you very much for your yetter and offering me an audience on May 21 but it will be impossible for me to keep this appointment, and as for furnishing you with 20 copies of what I might have to say, will not be necessary, but I would go on record definitely saying any and all dredging necessary in New York Harbor and cannot understand how a committee can eleminate the greatest port in the world, furnishing more funds from customs and shipping, than any other port in the United States. Dredging is a positive necessity and any neglected dredging of 1 year would cost at least double over the original cost the next year.

Will you kindly include us on the list of very interested firms in this particular phase of harbor work.

Very truly yours,

PERTH AMBOY DRY DOCK CO.,
C. PARKER RUNYON, *Vice President.*

Senator DWORSHAK. The committee will next hear from Congressman Jarman of Oklahoma.

OKLAHOMA CITY FLOODWAY

STATEMENT OF HON. JOHN JARMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

GENERAL STATEMENT

Representative JARMAN. Mr. Chairman and members of the committee: I am Representative of the Fifth Congressional District of Oklahoma, the Oklahoma City area, the central area of our State, appearing here in behalf of the budget request for the Oklahoma

City floodway, a subject upon which citizens of our city and the city area and the State have tremendous interests that will have great effect on the flood-control program in that southwestern part of the country.

Senator ELLENDER. Is that the floodway?

Representative JARMAN. Yes, sir.

AMOUNT REQUESTED

Senator ELLENDER. That is $1,800,000, is it, that you are asking for?

Representative JARMAN. Yes, sir; that is right. The details on this, Senator, will be presented, briefly, by two of our citizens from Oklahoma City, the city manager, Mr. Ross Taylor, and superintendent and engineer of the city water department, Mr. Morrison B. Cunningham, who are here.

Senator Kerr and Senator Monroney are out of the city today, and it is my pleasure to present these two gentlemen to the committee. Senator Monroney and Senator Kerr have already filed statements with the committee on this matter.

Senator DWORSHAK. Congressman, we have a statement here from Senator Kerr. Without objection it will be placed in the record at this point.

Representative JARMAN. It is my understanding that if the statement has not been filed, it will be filed by Senator Monroney within the next day or two.

(Senator Kerr's statement follows:)

STATEMENT OF SENATOR ROBERT S. KERR BEFORE THE SUBCOMMITTEE ON CIVIL FUNCTIONS OF THE SENATE APPROPRIATIONS COMMITTEE

I appreciate the opportunity to appear before this committee in behalf of appropriations for Oklahoma projects. This is the first time I have ever had the benefit of two budget estimates, and I must admit that neither is entirely satisfactory. Most assuredly they do not reflect the need for river and harbor and flood control works in the river basins of the Red and Arkansas.

If the pattern of past years is followed by the weatherman, before these hearings are completed, a major flood will occur on some one of our great rivers. The damage will not be so great as it has been in yesteryears because of the protection afforded by the projects that have been financed by appropriations made by this committee; but, the job is not complete—so, we will have a waste of the equivalent of one-half a billion dollars by the end of this year again. One-half a billion dollars deducted from our national wealth—destroyed—never to be recovered. We cannot afford to lose one-half a billion dollars year after year. We should be appropriating adequate money to eliminate as much of this annual flood toll as is economically possible. Our objective should be a policy of making available annual appropriations to construct public works which will prevent the recurrence of economic losses which we suffer in some section of our country every year and in almost every section of our country some years.

As long as we consider appropriations for resources development as an expense, instead of an investment which will return sound dividends, we will allow the chaos of flood and drought to deprive us of the benefits of our resources. Preventable flood damage is a waste that should not be tolerated any more than the destruction of other property.

In appearing before this committee, urging appropriations for Oklahoma projects, I am mindful of the fact that it is requiring more capital outlay to carry on this Government than at any other time in our history, but I do come here to argue the case of developing our natural resources and to allow the continuance of a program that is cutting down annual flood tolls.

CONSTRUCTION

I wish to submit information to this committee relative to construction funds which are immediately needed for projects in Oklahoma. Some of the projects are not contained in either of the budgets:

1. Oklahoma City floodway

This project is under construction and, due to favorable weather conditions, the contractor is well ahead of schedule. I have held conferences with the city officials who already have invested in excess of $2 million in this project; with the Corps of Engineers who last year were appropriated $1,200,000; and with the Bureau of the Budget who examine and prepare the estimates for annual appropriations. All agree that the most economic appropriation for the 1954 fiscal year should be $3,500,000. I note that the Eisenhower budget contains $1,800,000. I hope that this committee will give us the full $3,500,000 for this project.

It is essential that the construction of the project be coordinated with other public-improvement projects in which Oklahoma City is now engaged. For example, as the floodway is constructed, Oklahoma City will acquire right-of-way and build an express highway parallel to the floodway and, since Oklahoma City must acquire the right-of-way for the flood project, as well as the highway, construction should proceed simultaneously. Likewise, Oklahoma City is constructing a new State fairgrounds. This project is made possible only because the floodway protects this site from flooding and from backwater. Relocations of railroads and utilities which are made for the floodway project, will likewise be made for other public improvements in which Oklahoma City is engaged. Oklahoma City has voted $36 million for public improvements and Oklahoma County has voted an additional $7½ million. Therefore, it is essential that these great improvements progress simultaneously. If the appropriation is limited to $1,800,000 for the floodway, it will mean the retarding of other public improvements by the city and county. It is estimated that the final amount of money expended on the projects will be increased by as much as 25 percent of the total construction cost by such a slow-up. Therefore, I urge the committee to make available the $3,500,000 for the fiscal year 1954.

2. Bradens Bend (bank stabilization from Wilson's Rock to Fort Smith, Ark.) LeFlore County, Okla.

I am advised that both the Truman and Eisenhower budget recommended $4,800,000 for bank stabilization on the Arkansas River in Arkansas and Oklahoma, of which this project is a part. The fact that the same figure is in both budgets indicates the desirability of a minimum of that amount, and I urge that the committee see to it that this item is not reduced.

3. Fort Gibson Reservoir

Before this appropriation reaches the floor of Congress, the Chief of Engineers will participate in a great dedication service in Oklahoma, dedicating the Fort Gibson project on the Grand River, and Tenkiller Ferry on the Illinois River, both in Oklahoma. May I take this opportunity of extending a cordial invitation to every member of this committee to attend these ceremonies which will be held on June 6. Both projects are nearing completion. However, in connection with the Fort Gibson project, the Congress has authorized the construction of a water line connecting the Fort Gibson Reservoir and the water intake of the city of Muskogee. Notwithstanding the fact that this project is practically complete and in operation, no construction has been made on this portion of the project. Congress has determined that this flow line should be a part of the project inasmuch as the operation of the reservoir will interfere with the operation of a vested water right owned by the city of Muskogee. Therefore, we urge that this commitee appropriate adequate funds to commence the construction of the 36-inch line of reinforced concrete pipe, making it possible for Muskogee to be assured of operation of their municipal water supply system without interference or disruption. I would recommend for the initial appropriation a minimum of $500,000. The total cost will be approximately $1½ million.

4. Tenkiller Ferry Reservoir

It is noted that the Eisenhower budget makes a request of $200,000 to complete this project. The power generated at both Fort Gibson and Tenkiller Reservoirs will be put into the system of the Southwestern Power Administration and distributed over private utility lines to the REA's throughout the States of Oklahoma and Arkansas. This reservoir, in addition to providing flood control on the

Illinois and Arkansas Rivers, is now rated by the Oklahoma Game and Fish Commision as the best fishing spot in the Southwest. The Oklahoma Planning and Resources Board is making plans to develop State parks at both Tenkiller and Fort Gibson Reservoirs, at an estimated expenditure of $2 million in State funds.

5. Oologah Reservoir

This project was authorized by the Flood Control Act of 1938, and modified by the Flood Control Act of July 24, 1946. Congress has appropriated about one-half a million dollars for this project. In 1951 the President requested $1,500,000 for construction in a supplemental appropriation following the great flood in July of that year. The Army engineers have acquired the dam site and have built access roads. The landowners in the reservoir area have had their property values frozen for a number of years and should be given the opportunity to dispose of their lands to the Government.

Although the project is not in the budget, if it was wise to appropriate $500,000 to initiate construction, and, if it was necessary to make a request for $1,500,000 in July of 1951, it seems to me that it would be appropriate to make the appropriation and put the project under construction.

6. Toronto Reservoir

This reservoir is not in Oklahoma. It is on the Verdigris River in Kansas. Many people living on the Verdigris in Oklahoma have urged me to secure appropriations for the construction of this project. The Democratic budget contained an item for initiation of construction. The Eisenhower budget has eliminated that item. I urge that it be reconsidered and that construction be initiated this fiscal year. The sum of $1,500,000 would be a minimum requirement.

PLANNING

Recently I had the pleasure of a conference with the Hon. Joseph M. Dodge, Director of the Bureau of the Budget, in connection with one of Oklhoma's fine water-resources projects. In that conversation he advised me that he felt public-works construction should be used to bolster employment and Government participation in times of depression. It occurs to me that, if this is the policy of the executive department of the Government, then it is time that we were doing some planning on projects. Therefore, I urge that adequate planning funds be appropriated to provide for the planning of such projects as the Keystone Reservoir on the Arkansas River near Tulsa, Okla.; the Eufaula Reservoir on the South Canadian River near its mouth in Oklahoma; and the Strawn Reservoir on the Grand (Neosho) River in Kansas, which is upstream from the Oklahoma-Kansas line, and a number of local protection projects which are authorized and ready for advanced planning. I am advised by the Corps of Engineers that the present budget contains an item of $3 million, of which $100,000 would be allocated to the Keystone Reservoir. I would hope that this figure could be increased to provide for additional money for all of the above-named projects.

In the present budget are funds for the Arkansas-White-Red Basins Inter-Agency Committee in the amount of $515,000 for the Corps of Engineers. The Corps of Engineers is the chairman agency of this committee. They have the responsibility of not only directing the entire study but of providing the surveys and factual information for a great part of this report. The deadline for submission of the report had previously been set for June 30, 1954. If the Corps of Engineers are not allowed more than the $515,000 contained in the President's budget, it will mean that the report on this great 8-States area cannot be submitted to Congress, for at least another year. I urge that the appropriation be increased in order to complete the report on schedule.

Last year, when I appeared before this committee, I called attention to the fact that a few large projects were taking the vast majority of funds available for carrying on construction. While the Columbia and Missouri River Basins are securing the lion's share of the construction funds, the program is drying up in the area of the Arkansas-White-Red River drainage areas.

I should like to suggest to the committee the consideration of placing a floor for civil functions appropriations by river basins throughout the United States, thus providing a distribution of projects and making possible carrying on of the development of the water resources throughout the United States on a basis that would reverse the policy of feast and famine, stop and go, freeze and thaw.

I appreciate the indulgence of this committee and urge your consideration of each of the items which I have presented to you.

ANNUAL FLOOD LOSS

Representative JARMAN. This will relieve in a large measure the large annual flood loss of nearly a half million dollars.

Mr. Chairman, and gentlemen, if I may at this time I would like to present Mr. Ross Taylor, who is the city manager of Oklahoma City, for a brief statement on this subject.

CITY OF OKLAHOMA CITY, OKLA.

STATEMENT OF ROSS TAYLOR, CITY MANAGER

GENERAL STATEMENT

Mr. TAYLOR. Mr. Chairman and gentlemen of the committee, I am Ross Taylor, city manager of Oklahoma City. We appreciate the opportunity to appear here before this committee today and emphasize the need for sufficient appropriations to continue construction on the Oklahoma City flood wall. The Oklahoma City floodway is a flood-control project.

CONSTRUCTION OF NEW CHANNEL

Mr. Morrison Cunningham will explain to you more in detail from the maps that we have the various aspects of the project. It consists of the construction of a new channel 15 miles long through Oklahoma City to confine the North Canadian River. The North Canadian River, when the flood reaches 8,000 cubic feet per second, begins to overflow. We entered into an agreement with the Federal Government, through the Army engineers, in the summer of 1950 for the construction of this project. The city agreed to buy and provide for the Army engineers the rights-of-way.

Also, it is the city's obligation to remove all structures from this right-of-way, such as buildings, pipelines, and highway bridges. It was contemplated at that time that the project would be completed in 3 years. The people of Oklahoma City, in May 1950, authorized, through a bond issue, the first of the money to be used by the city in the participation by acquiring the rights-of-way.

The construction, the first construction, is under way now. As Mr. Cunningham will show you on the map, it has been started.

All of our planning in Oklahoma City, a major highway plan, and our major streets, has been based on the completion of this project. Part of the project beginning downstream is under way now. If adequate money or sufficient money is not appropriated next year to carry out the work as planned, there are various reasons why it will be almost disastrous to us. I think the Army engineers could tell you that if the project is stopped there probably will be sand go in the part of the channel they have constructed below.

AMOUNT REQUESTED

We are urging that you consider an adequate appropriation for next year which will more than amount to $1,800,000 before you. I be-

lieve the estimate of the cost of the entire project, including the city's participation, was around $17 million. A little over $10 million was for construction. That would mean it would be completed in 3 years, and the Army engineers would need approximately $3½ million next year to carry out the program as originally planned.

We are urging that you give consideration to the appropriating of sufficient money next year to carry out that plan.

I would like to say, as a personal matter, in view of the thinking you men are giving to reducing the Federal budget, that had this project not been started I would personally not be here urging you at this time for appropriations to begin the project. But I am calling your attention to the fact that it is started and, unless completed, in the long run will cost more money, which any engineer could prove to you.

1953 EXPENDITURES

Senator DWORSHAK. How much has been spent on your project already?

Mr. TAYLOR. The contract at the present time is $1,459,699, Senator. Approximately $900,000 was available for that contract during this fiscal year. This work began in January. Eight hundred thousand dollars was made available last year, and there was about a hundred thousand left over from a previous appropriation, making about $900,000 available now on this $1,459,000 contract.

STATE CONTRIBUTIONS

Senator DWORSHAK. How much has the State spent on it so far?

Mr. TAYLOR. We have spent a little over $2 million so far. We have completed acquiring the right-of-way all the way through. We have the right-of-way for that first section; we had that before construction began. Our heavy cost in addition to acquiring the rights-of-way will be the removing of structures and the construction of bridges. That is going to be our obligation to build bridges across this channel.

In several locations where we have a bridge now over the river, that bridge will be off several hundred yards from the new channel. It is estimated to carry out our part will require about $6.5 million from the city of Oklahoma City. We want to go ahead with it and finish it and carry out the project as originally planned over a 3-year period. That means that we are asking that you give consideration to appropriating approximately $3.5 million, or whatever part the Army engineers will be needing for that, for next year to carry out the budget.

REVISED BUDGET

Senator DWORSHAK. The revised budget asks for only $1,300,000 for 1954.

Mr. TAYLOR. I realize that. But I want to point out to you that it will require more than that to carry this out.

Senator DWORSHAK. Is this entirely a flood-control project or are there some navigation benefits involved?

Mr. TAYLOR. No, sir. This is flood control. There is no navigation involved in it at all.

Gentlemen, I would like to turn our presentation over to Mr. Morrison Cunningham, superintendent of the Oklahoma City Water Department, and our water engineer, who will present the matter in more detail. Thank you.

OKLAHOMA CITY WATER DEPARTMENT, OKLAHOMA CITY, OKLA.

STATEMENT OF MORRISON CUNNINGHAM, SUPERINTENDENT AND ENGINEER

PREPARED STATEMENT

Mr. Chairman and gentlemen, I am superintendent and engineer of the Oklahoma City Water Department. I would like to have permission, Mr. Chairman, to file a copy of my statement.

Senator DWORSHAK. Do you want all of that in the record, or just the first part?

Mr. CUNNINGHAM. It is all facts and figures on the project. The first part summarizes it and then the other is just supporting evidence.

Senator DWORSHAK. Without objection.

(Mr. Cunningham's statement follows:)

Gentlemen, my name is Morrison B. Cunningham. I am superintendent and engineer of the city of Oklahoma City Water Department. My appearance here is formally authorized by the mayor and City Council of Oklahoma City. I appreciate your courtesy in permitting me to present to you information concerning the Oklahoma City Floodway project, and respectfully urge approval of $3,500,000 budget request to continue construction work on the floodway project. This includes the completion of the present contract, continue relocation of two railroad bridges, and begin construction of the next unit of the channel.

Construction work on the first unit of this project is under way and consists largely of earth excavation, and will have a material effect on relieving some of the average annual flood loss of $407,910. Added construction since the report would materially increase this amount. To carry the project forward would, we believe, assist the defense program, rather than detract from it.

This project has received public approval by vote of the people of Oklahoma City on May 9, 1950, at which time funds were made available for the procurement of all the necessary rights-of-way, and for required local participation in the first units of construction. The rights-of-way are now available for the first part of the project.

The confidence with which the floodway construction will be expedited has resulted in $5,500,000 of new construction at this time. In addition, $75,860,000 of essential publicly and privately owned facilities depend upon protection from floods, offered by this project.

Reviewing our records at the time the city council agreed to the terms and conditions of floodway construction (July 27, 1950), publicly and privately owned facilities located in the area to be protected amounted to $63,860,000.

Present value	$75,860,000
Now under construction	5,500,000
Total	81,360,000

These figures show construction and work under way amounted to $17,500,000, or an average of $5,833,000 per year since July 27, 1950. This construction was built in good faith and was contingent upon the belief that the floodway project would progress at a rate considered reasonable. Now if completion is delayed, this property, as well as existing construction, will be in danger of flood damage.

When the project was initiated, we had contemplated a 3-year completion, subject to availability of funds.

Also, as work progresses in the outlet section, evidence of damages due to sand deposits has already been encountered.

Community planning is built around completion of the project, especially 12 miles of expressways awaiting construction are within the area to be protected from floods.

This is the basis of our request for $3,500,000.

SUMMARY OF THE PROJECT

The project has been designated by the Corps of Engineers as Oklahoma City Floodway—North Canadian River. It runs through Oklahoma City (bisects the city) and areas adjacent thereto, extending east and west of the city property—two-thirds of the city being on the north side of the river and one-third on the south side. The type of construction is an excavated channel. Surplus excavation will be used for making fills for proposed urban and express highways, and for filling the low areas in the flood plain, making them usable for residential, business, and industrial purposes, and park beautification.

The length of the floodway project is 15 miles.

The Oklahoma City Floodway project is 1 of a system of 4 flood-control projects on the North Canadian River, in Oklahoma, of which the 2 reservoir projects at Canton and Fort Supply, upstream from Oklahoma City, have been completed; and the fourth is the authorized Optima Reservoir, still further upstream.

VALUE OF PROPERTY TO BE PROTECTED

Evidence of confidence the project will be constructed without delay is shown by the value of property in the flood plain which the Oklahoma City Floodway project will protect from flood damage, as follows: Public property $14,750,000, and private property $61,110,000, making a total of all essential public and privately owned facilities $75,860,000.

A recent review shows that 90 percent of all the facilities and services within the flood plain areas are essential to the national defense program, detailed more fully in supplement attached.

SUMMARY OF MAJOR BENEFITS TO BE SECURED BY THE PROTECTION AGAINST FLOODS, AND THE CONSTRUCTION OF THE OKLAHOMA CITY FLOODWAY PROJECT

A. It will vitalize the construction of 52 miles of expressways provided for in the Oklahoma City, and Oklahoma County, master plan; 12 miles of these expressways are within the area to be protected from flooding, and include the new expressway from Tinker Field to Oklahoma City. We have acquired most of the rights-of-way for these expressways.

B. The new State fairgrounds, recently purchased by the city, and for the construction of which $4,750,000 in funds was provided through the bond issue of May 9, 1950, requires flood protection and drainage in certain portions which this floodway will provide. The new State fairgrounds is designed with modern, fireproof buildings, for year-round use. Construction of these facilities is now getting under way. It will be a great center for educational purposes, such as 4–H and FFA, and is closely tied in with the Oklahoma A. & M. College demonstration farm.

C. The present State fairgrounds, which is presently being converted into a Negro vocational high school, and other Negro public facilities, is now inundated at times of flood. This flood protection will expand usable portions of the grounds and help improve facilities for the Negro population of Oklahoma City.

D. This project will protect lives and property. Fourteen lives have been lost by flood. The average annual flood loss, without floodway, totals $407,910.

E. Two thousand acres of land adjoining the floodway will be filled and reclaimed with earth wasted from canal excavation. A total of 5,000 acres in the Oklahoma City area will be protected from floods and made available for general use.

F. Under the recent Oklahoma County bond issue, and the 1950 Oklahoma City bond issue, the master plan of the county highway system has been established and fixed as to location.

This master plan provides for the vast development of the Oklahoma City metropolitan area, and much of Oklahoma County, thereby making it available for zoning for residences, business, and industry. This development is progressing on the assurance that the Oklahoma City Floodway project will be constructed rapidly.

G. Public health will be improved through the elimination of low areas, where disease-carrying insects multiply.

H. Family rescue and rehabilitation in low river-bottom areas, now a major problem at times of flood and flood threat, will be largely eliminated.

I. Elimination of juvenile and adult delinquency, a major portion of which has its source in the substandard river-bottom area, will go forward through stimulation to better homes and healthier surroundings, and beautification by construction of parks and recreational facilities in areas now subject to flood.

J. Public and private utilities cost of construction and maintenance will be lowered by confining the North Canadian River to a definite location and width, through lesser flood protection requirements; and by shortening river crossings. Rail, highway, and street crossings will be similarly benefited. Storm-sewer construction will be greatly benefited by the construction of lateral drainage as a part of the floodway construction.

K. Permanent new public school construction will be warranted with funds now available in sections of the flood plain where the present flood threat makes such construction impracticable.

General.—A program of general improvement, beautification, and utilization is now being planned throughout the North Canadian River area. The floodway is basic to this area. Its construction will permit utilization of some 2,000 acres now largely waste, and will further give flood protection to some 5,000 acres covering areas of residential, commercial, and industrial development now subject to possible flooding.

Plans for local participation through bond issue are based upon assumption that the Federal authorization of funds, and appropriation of sufficient funds, will be made to continue construction of the Oklahoma City floodway project as rapidly as possible.

On behalf of the city of Oklahoma City, I want to express our appreciation for your consideration, and for permitting this statement to be presented.

SUPPLEMENT NO. 1

THE OKLAHOMA CITY FLOODWAY

ESSENTIAL INDUSTRIES AND SERVICES WHICH WILL RECEIVE PROTECTION FROM FLOOD DAMAGE THROUGH CONSTRUCTION OF THE OKLAHOMA CITY FLOODWAY

NOTE.—The term "Essential" is given those operations which will directly support a national defense program, or which are of a type easily converted to such. The flood plain referred to herein is that of the greatest flood of record (1923).

SUMMATION

1. Based upon dollar value of existing facilities, 90 percent of all facilities and services within the flood-plain area are essential to a national defense program.

2. Upon the basis of services necessary to the city as a whole, and therefore to any part of a national defense program in which this city may engage, a very large proportion of the essential services and operations in the flood plain are absolutely indispensable. Particularly is this true with reference to rail and truck transportation services which are highly centralized in this area; and to utilities which serve all or large portions of this city. Disruption of these services would be disastrous to the entire city.

3. Cost of the project lies largely in earth movement, land for right-of-way, and general labor, rather than in materials. Use of critical materials such as steel and concrete will be at a minimum in proportion to the size of the project. Consequently, benefits in ratio to critical materials is high.

The following detail supports these conclusions.

1. GENERAL DESCRIPTION OF RIVER AREA AND DEVELOPMENTS THEREIN

The North Canadian River flows eastward directly through Oklahoma City. Approximately two-thirds of city development lies north of the river; one-third south thereof.

Center of the downtown business district lies approximately three-quarter mile from the nearest point on the river.

Record flood plain ranges from 1 to 1¾ miles in width through the city, reaching to within one-quarter mile of the center of the business district.

Flood damage begins with flow of 8,000 cubic feet per second. At 16,000 cubic feet per second damage is widespread and a large proportion of operations within the area are halted, streets overflowed, and hundreds of families must be moved out of the area.

Greatest flood of record (1923) produced a flow of more than 100,000 cubic feet per second. This flood, modified by reservoirs now in place at Canton (60 miles upstream) and at Fort Supply (140 miles upstream) would produce 20,000 cubic feet per second flow at Oklahoma City. Engineers are agreed that it is possible for as great a flood to develop below these protective works. Local floods up to 42,000 cubic feet per second are of record, such as June 1932.

Authorized floodway channel will carry 45,000 cubic feet per second.

Although there are large areas of waste or unused land in the flood plain, nevertheless many of the city's most important and essential industries and services, both public and private, lie therein.

Summary of the essential publicly and privately owned facilities located in the area

Residential housing.—Residences in the flood plain, house approximately 14,000 people. Lower residential areas are inundated beginning the 8,000 cubit feet per second; most of the areas with 16,000 cubic feet per second flood. Approximately half of these people who are employed work for business or industry essential to the war effort, and many of them are employed at Tinker Field.

Employment.—Total employment in this area, subject to floods, is estimated to be 6,000. Employed in essential industries and services, public and private, is estimated to be 3,000. Floods of 16,000 cubic feet per second seriously damages and stops work within the area.

All railroads serving the city traverse the river area. Four of the five railroads have their central facilities—passenger and freight, depots, yards, two roundhouses, and miles of general and industrial trackage—within the flood plain.

On May 9, 1950, the people of Oklahoma City voted a $36 million bond issue, of which more than one-third of the money will be used for the construction of community facilities within the area to be protected by the floodway.

These improvements consist of—

Fire department	$600,000
Flooway project	2,755,000
Library	822,000
Parks and parkways (the park strip will extend along most of the right-of-way on the proposed floodway)	2,200,000
Police department	329,000
Sanitary sewers	4,540,000
Storm sewers	2,710,000
Street improvements	6,500,000
Traffic control	200,000
Airports	600,000
Fairgrounds	4,750,000
Water department	10,048,000
Total funds available	35,974,000

NOTE.—More than ⅓ of this investment within area to be protected.

On December 11, 1951, the county and Oklahoma City voted $7,427,000 to provide the right-of-way necessary to carry out the master plan for 52 miles of expressways around and through Oklahoma City. Funds include purchase of the right-of-way for the new Military Road leading from Oklahoma City to Tinker Field, also several miles of county highways.

In this area are bridges carrying United States Highways Nos. 62, 77 (military designations) 270 and 277; and State Highways Nos. 3, 41, and 74.

Thirty-three intrastate and interstate trucking firms have terminals in the flood plain area. A number of the heaviest electric power lines of the city, and its largest central substation are in the area.

The 2-mile width of the Oklahoma City oil field is traversed by the river area. Therein are 65 producing wells, 4 crude-oil storage-tank farms, 5 refineries, and a very large number of pipelines, both trunk and gathering lines, handling both crude oil and natural gas.

State fair grounds

The relocation of the present State fair grounds was approved by vote of the people when $4,750,000 was made available for construction on a section of land now owned by the city. Modern, fireproof buildings for year-round use, new all-purpose arena seating 12,500 people, a great center for 4-H and FFA, closely tied in with the Oklahoma Agricultural and Mechanical College demonstration farm. The new area is located entirely within the area to be protected from floods by the Oklahoma Floodway project.

The present State fair gounds are now in the process of being converted to a Negro vocational high school, and other Negro public facilities, also subject to inundation at times of flood. Construction of the floodway project will expand the usable portion of this area, and materially help facilities for the Negro population.

Summarizing the city bond issue of $36 million, specific items are called to your attention for the purpose of showing the importance of this area to be protected by the floodway project. More than one-third of the total bond-issue funds are to be spent within the area to be protected. This money represents public improvements and does not include money being spent by other units of the government, such as for Federal highways, and for county and State highways and bridges. In addition, large amounts of privately owned utilities are making investments, such as railroads, gas and electric utilities, telephone and telegraph companies, private residences, business and industry, particularly oil production and refining.

Largest of the city's sewage-disposal plants, recently completed at a cost of $4,500,000, and 7 sanitary sewer lines, 18 to 60 inches in size, are in the area.

Ten city water mains lie therein; other large lines urgently needed will be constructed soon.

Other major facilities within the area include—

Seventeen telephone and telegraph lines.

One radio-transmitter station and tower (KTOK).

Cotton compress with 35,000-bale storage capacity.

One large flour mill.

Two cottonseed-crushing plants.

One commercial airport, heavily used by 1-engine and light 2-engine aircraft.

One steel-fabricating plant.

One steel compress.

Two large asphalt mixing plants.

One large trailer manufacturing and numerous equipment, industrial, and manufacturing plants.

These and other essential public and private facilities are classified and have estimated value of land, improvements, equipment, and stocks.

A more detailed summary of these improvements is included as a supplement.

2. CLASSIFICATION AND VALUE OF PUBLIC AND PRIVATE UTILITIES, INDUSTRIES, AND SERVICES LOCATED WITH THE FLOOD PLAIN

Public-owned facilities:	
Public utilities: 10 water lines, 7 large sanitary sewer lines, recently constructed $4,500,000 sewage-disposal plant, various storm sewers, included in estimates value of	$8,550,000
Highways, bridges, and streets: Includes highways and bridges carrying designated U. S. Military Highways Nos. 62 and 77; also U. S. Highways Nos. 270 and 277; State highways and bridges on Nos. 3, 41, and 74; 9 other local street and bridge crossings, included in estimated value of	5,700,000
Educational facilities: Includes 6 white and Negro public schools, estimated value	500,000
Total estimated value publicly owned facilities (public parks valued at $2,000,000 not included)	14,750,000

2. CLASSIFICATION AND VALUE OF PUBLIC AND PRIVATE UTILITIES, INDUSTRIES, AND SERVICES LOCATED WITH THE FLOOD PLAN—continued

Privately owned facilities and services:	
Utilities: Includes 17 power lines, largest electric substation in city, natural-gas distributing lines, estimated value	$1,850,000
Transportation: 2 railroad passenger stations (one for 2 lines), 3 railroad freight depots, 3 railroad yards, 2 roundhouses, City Bus. Co. shops, bus storage yards, general headquarters, 33 interstate and intrastate truck-line terminals, and offices, shops, etc., 1 commercial airport, estimated value	9,800,000
Communication facilities: 17 local and long-distance telephone and telegraph lines; 1 radio transmitter station and tower, estimated value	600,000
NOTE.—U. S. Post Office Department is in process of purchasing land for $3,300,000 structure in the flood plain where it plans to construct facility where all incoming and outgoing mail will be received, worked, and dispatched.	
Oil wells, pipelines, storage, refining: Includes 65 producing oil wells; 20 crude-oil trunk and gathering lines; 36 natural-gas gathering and trunk lines; 4 oil storage tank "farms"; 5 refineries; producing and pump equipment; estimated value	5,000,000
Essential manufacturing and processing operations (see attached list): Includes metal fabricators and processors; oil field and refinery equipment and supplies; construction materials; meat and other foods; livestock feeds; industrial and agricultural chemicals; truck body and trailer manufacturers; machine shop products; mill and other woodworking operations; vegetable-oil processors; and others capable of converting to essential production; estimated value	29,135,000
NOTE.—Essential industries constitute over 90 percent of all industry within the flood plain.	
Essential commercial operations: Includes industrial and contion-machinery suppliers; construction-materials distributors and warehousers; cold storage plants; food wholesalers and warehousers; farm-equipment suppliers; scrap-metal assemblers; construction firm material and equipment yards; specialized services to essential industries; etc., estimated value	2,500,000
NOTE.—Approximately 30 percent of total commercial operations in the area are essential.	
Residential housing, population: Residences in the flood-plain house approximately 14,000 people. Lower residental areas are inundated with 12,000 c. f. s. flood; all areas with 16,000 c. f. s. flood. Recent construction has added to that reported by engineers; estimated value of residential properties and household goods	10,000,000
Farmlands and production: Outside of the immediate environs of the city, both upstream and downstream within the protective area, various agricultural operations are carried on. Much of the farming area is very fertile. Farmlands, improvements, stock, equipment, and supplies are involved. These are regarded as essential operations. Estimated value	2,225,000
Total value of essential privately owned facilities	61,110,000
Total value of essential publicly owned facilities	14,750,000
Total value of all essential public and privately owned facilities	75,860,000
New fairgrounds and miscellaneous construction now underway	5,500,000
Grand total	81,360,000

Employment

Total employment in the flood-plain area is estimated currently at 6,000. Employment in essential industries and services, public and private, is estimated at 3,000. Interference with employment is serious with 16,000 c. f. s. flood.

Public health

Many hundreds of acres of low lands contain stagnant water, trash dumps, and other disease- and insect-breeding conditions. Prevailing southerly winds blow disease carriers into the main business district where there is heavy concentration of workrs, hotels, and restaurants. Construction of the floodway will eliminate all or practically all of these public-health threats.

Planned public improvements

In May 1950, Oklahoma City voted bond issues totaling $36 million for various public improvements, including the sum of $2,775,000 for acquisition of rights-of-way for the Oklahoma City Floodway, and local participation in first units of construction.

Also included was money for urgently needed water mains, sanitary sewer, and storm-sewer lines; urban highway, street and other improvements which involve the flood plain of the North Canadian River to a major extent. Plans for this construction, and cost estimates, are based upon the assumption that the floodway will be constructed at once.

At least one-third of Oklahoma City—especially the area lying south of the North Canadian River is now seriously handicapped in its daily operations by lack of these facilities, particularly water and sanitary sewer lines. These facilities must cross the river area to connect with central pumping and disposal points.

Military highways

As stated earlier herein, United States Highways Nos. 62 and 77—which are a part of the designated military highway system of the Nation—cross this river bottom on presently designated routes.

The approved urban road system of the city, part of which is now under construction and for other parts of which the city has already acquired right-of-way, proposes the rerouting of both of these highways and United States Highway No. 66, also of military designation, through the flood-plain area. This rerouting is based upon assumption that approved plans for the floodway will be carried out.

Lands to be acquired by the city for the floodway rights-of-way will also provide rights-of-way for approximately 7 miles of the urban highway system, carrying these 3 military highways.

SUPPLEMENT No. 1–A

ESTIMATE OF THE VALUE OF "ESSENTIAL MANUFACTURING AND PROCESSING OPERATIONS" LOCATED IN THE FLOOD PLAIN OF 1923 FLOOD

I am listing below those operations, which include metal fabricators and processors, oilfield and refinery equipment and supplies, construction materials, meat and other foods, livestock feeds, industrial and agricultural chemicals, truck body and trailer manufacturers, machine-shop products, mill and other woodworking operations, vegetable oil processors; and others capable of converting to essential production.

Firm and address	Product	Estimated value
A. R. K. Manufacturing Co., 1321 South Walker	Cast bronze and aluminum products	$100,000
Acme Flour Mills Co.,[1] 19 South West 12th	Flour and feed	450,000
Acme Millwork & Supply Co., 515 North Kentucky	Millwork	50,000
Adams-Irick Truck Body Works, 1429 West California.	Truck bodies and trailers	50,000
American Body and Trailer, Inc., 1500 Exchange Ave	Trailer and bus equipment for Army Ordnance, continuous production.	1,500,000
Atlee Dairy, 1601 Exchange Ave	Dairy products	70,000
Barada & Page, Inc., 203 South Compress	Chemicals	80,000
Beatrice Foods Co., 316-22 North Western	Dairy products	800,000
Belsky Manufacturing Co., Inc., 900 West California.	Refrigeration cases	125,000
Black, Sivalls & Bryson, Inc.,[1] 2131 Westwood	Tanks, oil and gas separators, etc	4,000,000
W. H. Butcher Packing Co., 101 South East 8th	Meat products	90,000
Butts Electric Works, Main and Pennsylvania	Armature winding	75,000
California Spray Chemical Co., 1010 East Reno	Chemicals	200,000
Canadian Valley Meat Co., 1240 South West 15th	Meat packing	75,000
Capitol Bag Co., 1621-29 West Grand	Burlap, mesh and cotton bags	150,000
Clayton-Dorris Co. Inc., 103 South Pennsylvania	Furniture	75,000
Continental Baking Co., 121 West Washington	Bakery	1,500,000
Cornett Packing Co., 200 East Choctaw	Meat products	50,000
Domar Manufacturing Co., Inc., 2 South Penn	Plastic molding, etc	50,000
Double Eagle Refining Co., 1900 NE. 1st	Petroleum refining products	200,000
Drug Sundries, Inc., 1514 East Reno	Drugs and cosmetics	80,000
Eagle-Picher Co., Paint and Varnish Division, 1801 West Grand.	Paint and varnish	600,000
Enterprise Foundry, Inc.,[1] 817 South Broadway	Grey iron castings	90,000
Executive Furniture, Inc.,[1] 911 South Walker	Desks, ratio cabinets, etc	350,000
Frisco Packing Co., 644 South Walnut	Meat packing	100,000
Governair Corp., 513 North Blackwelder	Air conditioning equipment	250,000
Harris Meat Packing Co., 1616 West Reno	Meat packing	200,000
Industrial Gasket & Packing Co., Inc.,[1] 801 South Walker.	Gaskets and packing	75,000
Industrial Machine Co., 1546 West Reno	Steel fabrication and machinery	130,000
International Manufacturing Co., 600 East Grand	Air conditioning equipment	80,000
Jennings Mills, Inc., 216 South Compress	Feeds, flour, and grain-mill products	250,000
Fred Jones Manufacturing Co., 215 West Washington.	Engines rebuilt and auto parts manufactured.	1,000,000
Harry Keeton Supply Co., 1522 West Main	Cotton felt, mattress ticks	200,000
L. & S. Bearing Co., 3 North Pennsylvania	Bearings	450,000
Linde Air Products Co., 1000 SW. 2d	Industrial gases	75,000
Lumberman's Supply Co., 1530 West Main	Millwork	150,000
Mac's Supply Co., 2727 West Reno	Gasoline storage tanks	75,000
Makins Sand & Gravel Co.[1], 100 South East 4th	Sand, gravel and concrete	250,000
Geo. E. Martin & Co.[1], 19 North Dewey	Leather goods	75,000
Metropolitan Paving Co.,[1] 300 South Indiana	Asphalt paving	1,200,000
Monarch Refineries, Inc.,[1] 2800 East 4th	Petroleum refining	5,000,000
Midwestern Perlite Corp., 201 North Eastern	Light weight aggregate	150,000
Morgan Sash & Door Co., 1100 South West 3d	Millwork	400,000
Mud Control Laboratory, Inc., 1832 West Reno	Oilfield tools	150,000
W. L. Oakes Manufacturing Co.,[1] 615 South West 9th St.	Ladders, millwork	90,000
Oklahoma Bed Springs Co., 712 South Broadway	Mattresses, springs and bedding	125,000
Oklahoma Gear Works, 325 South West 6th	Gears and chain sprockets	50,000
Oklahoma Oxygen Co., Exchange and Kentucky	Oxygen, industrial gases	50,000
Oklahoma Waste Material Co., 1100 East Reno	Wiping rags	250,000
Para-Lac Chemical Co., 1245 South Eastern	Oil well chemicals	75,000
Peoples Packing Co., Inc., 103 South East 8th St	Meat packing	100,000
Planet Oil & Refining Co., 416 North Eastern	Lubricating oils	150,000
Precision Machine Works, 1795 South East 15th St	Auto parts and accessories	75,000
Producers Cooperative Oil Mill, 5 East Frisco	Cottonseed products	125,000
C. W. Rathburn Co., 800 West Grand	Truck bodies and trailers	50,000
Reliable Tent and Awning Co., 324 West Reno	Awnings, etc	75,000
Reisman Products Co., 207 South Compress	Laundry bleach, etc	25,000
Seck Trailer Manufacturing Co., 1345 West Reno	Custom-built truck trailers and bodies	50,000
Soil Booster Corp., 2501 East 4th St	Fertilizer	75,000
Southwest Awning Co., 217 South Broadway	Truck tarpaulins, etc	25,000
Southwest Factor, Inc., 1432 West Main St	Propane tanks, steel fabrication	150,000
Southwestern Cotton Oil Co., 6 East Chickasaw	Cottonseed products	125,000
Southwestern Supply & Machine Works, 6 East Chickasaw.	Conveying equipment	100,000
Steel Sales & Supply Co., 2-12 West Pottawatomie	Building materials	150,000
Superior Feed Mills, Inc., 2100 South Robinson	Feeds	3,000,000
Traders Compress Co., 2001 East Reno	Cotton compress	1,000,000
Tri-State Paint & Chemical Co., 1245-47 South Eastern.	Paints	50,000
W. & W. Steel Co.,[1] 1730 West Reno	Steel building and steel fabrication	2,000,000
Wylie Bros., Inc., 1840 West Reno	Steel fabrication	100,000
Total		29,135,000

[1] Firms now in production on defense contracts or defense subcontracts.

Senator DWORSHAK. How about those names at the end. Are they one part of it?

Mr. CUNNINGHAM. Yes, sir.

DESCRIPTION OF PROJECT

I would like to take just a few minutes to summarize what appears to be some of the important factors. I wish to first point out on the map so you can know what the project is. It is known as the Oklahoma City floodway project, Oklahoma City-North Canadian River. This river has 12,000 square miles drainage area. About one-third of the city is on the south and about one-third of the city is on the north. It is within a half mile of our downtown area. Here is the post office. This area shows the river. It is 15 miles of river which is to be improved by widening and deepening to carry the floods through the city. The northern part of the project is now under contract and is under construction. This picture is an aerial view that was taken some time ago.

This covers 4 miles of area and shows the clearing and excavation.

As you come downstream, here is another view, located further down. This is only about a 10,000-second flow in 1951. We have had up to 130,000-second flow, which is our record flow. You can see an oil well being drilled. We have 56 producing oil wells in the area, we have 5 oil refineries to be protected.

There are four oil-storage farms and, of course, many miles of pipeline gathering systems for oil and gas in the area.

The Oklahoma City field, of course, goes through the entire eastern half of the city. We have 56 producing oil wells and more being drilled within the area to be protected by the project.

This is another view further down the river, which shows how the highway is flooded. Here is another picture, going further south on the river, which shows the same flood.

This is a picture of a spot near the sewage-treatment plant. This is a $4½ million plant which is built in the area.

The next picture is also at the end of the portion that is now under construction. This is just a view showing some of the buildings.

REQUEST FOR ORIGINAL APPROPRIATION

This appropriation we had hoped could be the original appropriation which we had requested, $3½ million. I believe that was reduced to $3,200,000, which, as you mentioned a moment ago, has been reduced still further. We had hoped for a much larger appropriation in order to carry out the construction and completion of the present contract, but to also change the two railroad bridges.

This $3,200,000 would then be available to start construction in the next portion.

A greater part of our whole planning in the area is based upon this channel construction which, after all, has been under very serious consideration since 1923. But you can see how important the new channel is on account of this military road for which the right-of-way is now, I believe, entirely purchased.

ANNUAL FLOOD-DAMAGE COSTS

Senator DWORSHAK. How much actual flood damages have resulted, would you say, during the past decade in that area?

Mr. CUNNINGHAM. Since 1923 the average has been $407,000 a year. Those figures are, I would say, at least 6 or maybe 8 years old. I am sure if we revised the figures, that would be close to a half million dollars.

The property in the flood plain, in the area to be protected, which is some 5,000 acres, is $81 million, which is manufacturing, business, and residential, and that does not include contents. Since the city signed the agreement with the Federal Government 3 years ago, there has been an average of $5,800,000 of new construction each year. In other words, there has been over $17 million of new construction going into this area, which, I believe, is one of the best expressions of the confidence the people in the community have that the project will be expedited, consistent with funds available, and construction will be carried on to completion at the earliest time.

LOCAL INTERESTS

The community, the local interests, have always talked in terms of 3-year completion in order to get this property protected.

This shows a picture of all new investments in the last 3 years. Here is a metal-compressing plant, and a steelyard, which are just typical of the area.

The next picture shows a railroad yard, with its roundhouse. We have five railroads that cross or run parallel to this area that is to be protected from the floods. Three of the railroads have all of their yards and roundhouses, three of the railroads have depots and freight depots, passenger and freight, within the area that we are talking about.

The next picture is typical of the flood that occurs in the park area, which is one of the highly congested areas, residential areas. We have 16,000 people living in this area, and 6,000 employed people. Ninety percent of this $81 million that I mentioned is considered as essential industry, essential to a war effort.

This is another view showing the flooding there in adjacent areas which have been built up. Those pictures do not show in detail the construction within the flood plain.

The next picture is a typical example of the trucking industry. We have 33 interstate and intrastate trucking depots and facilities. This is a new one, which cost $800,000, and is just completed. It is within one-half mile of the river. That is one of the best expressions. I talked to Mr. Lee a while ago and he said, "I am not worrying about the flood, because I have full confidence that everybody concerned will go right along with the project. They have made a $800,000 investment in the belief that it will be protected. We are very hopeful that we can go along.

This next picture is a typical view of new industry. Most of this shown is new. Here is a steel-fabricating plant, and a trailer-manufacturing corporation, and supply houses in there that supply essential industry with parts and equipment. This is just a typical view. Of course, we can show hundreds of others.

POPULATION

Senator DWORSHAK. What is the population of Oklahoma City?

Mr. CUNNINGHAM. 250,000, sir. The area that is served by this, the metropolitan area, of course, exceeds 300,000 in population.

Senator ELLENDER. Does that shaded area show the extent to which floods cover the city?

Mr. CUNNINGHAM. This shows the extent of the flood, and we only cover here the part that is through the built-up area of the city.

1932 FLOOD

This was a flood that originated in June 1932, from this Lightning Creek, which is a part of Oklahoma City. That flood originated within the city, when a 12-inch rain occurred, and this is the area that was flooded. That area, of course, will be protected, some 5,000 acres. Two thousand acres will be filled, fortunately. Industry and building has hesitated going into this area. Fortunately, we have 2,000 acres which, when we excavate the channel we can fill, so we won't have the places in bottom but will reclaim the land and make it available for use.

Senator DWORSHAK. You are planning to develop that phase No. 1 first, is that it?

Mr. CUNNINGHAM. That is under contract; yes, sir. This portion is under contract right now. The very next thing are two big railroad bridges. That is going to be rather expensive. Then we hope to get into part of phase No. 2, and get that under construction.

Senator DWORSHAK. Does that complete your testimony?

Mr. CUNNINGHAM. Yes, sir.

Senator DWORSHAK. We thank you, sir.

Mr. CUNNINGHAM. Thank you.

Senator DWORSHAK. The committee will be glad to hear from Congressman Porter Hardy and other witnesses from Norfolk.

Mr. MCNEILL. Mr. Chairman, for the record I am Warren McNeill, Senator Robertson's administrative assistant. Senator Robertson had to leave town to keep an engagement. He asked me if I would read a brief statement which he dictated into the record before Mr. Hardy presents his statement.

CRANEY ISLAND DISPOSAL AREA

STATEMENT OF HON. A. WILLIS ROBERTSON, A UNITED STATES SENATOR FROM THE STATE OF VIRGINIA

GENERAL STATEMENT

Senator ROBERTSON. Mr. Chairman, in view of the fact that Representative Porter Hardy of the Second Virginia District, and representatives of Norfolk Harbor and the Corps of Engineers in charge of maintenance work for Hampton Roads all are present today and all have more detailed information concerning the need for the Craney Island disposal area than I, I shall make just a brief comment concerning that item.

I understand it was not approved by the new Budget Director because of a general policy, and I think a wise one, of not authorizing

any new starts until our fiscal situation had been improved. The Craney Island disposal area was mentioned as a new start but as a matter of fact, I think it could properly be listed as a necessary expansion of the authorized harbor maintenance work because without it the cost of that maintenance work will be increased by the sum of $600,000 per year. Even if it is technically characterized as a new start we must bear in mind the old maxim, "It is the exception that proves the rule." In other words, most rules are general declarations and are established by proof of the fact that an occasional exception merely shows that the rule covers a particular field rather fully.

IMPORTANT BASES IN AREA

It is of course well known to the members of this committee and, I hope to the entire Congress, that Hampton Roads is one of our largest harbors and one of the really great harbors of the world; that the Norfolk Naval Base is the largest naval base in the world; that the Newport News Shipbuilding & Dry Dock Co. is the largest privately owned shipbuilding company in the world; that the Norfolk Naval Yard in Portsmouth, while not the largest, is one of the most efficient Government shipyards we have; that the tonnage which moves through the ports of Hampton Roads in peacetime, as in war, is exceeded only by that of the port of New York. In other words, the maintenance of at least a 35-foot channel in the Norfolk Harbor is a military, as well as an economic necessity and the Government has properly recognized and provided for that maintenance work.

NEED FOR DISPOSAL AREA

But a situation has arisen in which the Army engineers are unable to find any satisfactory disposal area for the material that must be moved in its harbor-maintenance work. Such an area has been found at Cranery Island and the Army engineers have strongly recommended its acquisition, but the Budget Bureau has turned the item down because, in its opinion, it involved a violation of its rule against new starts.

Mr. Chairman, in my opinion, if this committee is convinced from the testimony to be presented today, especially by the Army engineers, that a great deal of money would be saved by the Government in providing for a more economical disposal of waste material, our committee would be justified in providing for the acquisition of the Cranery Island disposal area as both a proper and necessary part of the harbor maintenance operations of the Army engineers.

Mr. McNeill. Mr. Hardy will take over. The Senator also said he would appreciate it if you would bring out from the engineers the defense angle of this project.

STATEMENT OF HON. PORTER HARDY, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

GENERAL STATEMENT

Representative Hardy. I am more than grateful to discuss this proposal with your committee. I am grateful also to our junior Senator for sending Mr. McNeill over here to present a statement in his behalf.

Before I get through, I am going to take issue with some of the information contained in Senator Robertson's statement, because I feel certain that it must be based on some information that the Bureau of the Budget has which is not entirely accurate and does not present the picture as it should be presented.

BACKGROUND OF PROPOSED PROJECT

With your permission, I would like to give you a little background of this proposed disposal area. This is not the first time that I have appeared before this committee to discuss this subject. This is the first time, frankly, gentlemen, that I have been here in anticipation of getting approval of it and getting the funds to do it, because the situation is such now that I think we have no alternative but to build this disposal area.

Last year I offered an amendment on the House side without any hope that it would be approved, because it was opposed by the Bureau of the Budget, and actually because the situation at that time was not emergency. I offered that amendment because I anticipated that we were going to soon be inexactly the situation that we find ourselves in today. For a good many years, the material dredged in our harbors and channels has been dumped in some deep holes in the harbor of Hampton Roads. We had some holes in that harbor that were as much as 80 feet deep. The quickest, easiest, most economical way to dispose of that material was to take it out and dump it in those holes.

Last year the engineers estimated that within a year and a half or 2 years those holes would be filled. It seemed to me then, as a matter of good sense, we should then make provision for some place to put this material. So I offered the amendment. But because of the opposition, I was not able to get very far with it.

FEBRUARY 1953 SITUATION

In February of this year, the situation became acute. These holes had been filled up, and the district engineer had to discontinue the issuance of any permits for further dumping in these holes. The currents on the bottom of the harbor are pretty hard to predict. At one time it was thought that when this material was dumped in these holes, the currents would carry it out to sea. Instead of that there are now indications that the currents are washing it back up into the channels and we are dredging out the same mud that we have taken out once already. But that is not the worst part of the situation. Unless we maintain our harbor, our channels, and our piers, from a purely defense standpoint we are going to be in serious trouble if we should get into a war, if we should have a little mudbank pile up on that channel and our convoys cannot get in and out. It is one of the most serious things that I think our Nation has been confronted with in the event of hostilities where we had to quickly move troops and supplies, and not infrequently we have convoys of 150 ships going out of Hampton Roads in wartime.

The alternative is to build somewhere to dispose of this material or to carry it to sea. I got from the engineers some estimates on the annual amount of material that had to be dredged out of the harbor,

the tributary channels, and in connection with the maintenance of the piers, both from a Government point and from a private standpoint.

TOTAL CUBIC YARDS OF DREDGING

The estimate is that anually there are 3,800,000 cubic yards of governmental work that has to be done in that area. In addition, there is another perhaps 800,000 cubic yards of private material that has to be dredged.

Senator HOLLAND. Does this come down the James River to settle there?

Representative HARDY. The James River, as you know, Senator, forms a part of the Hampton Roads Harbor. The mouth of the James River where it converges with the Chesapeake Bay and Elizabeth River, forms Hampton Roads. Some of it comes down the James River, perhaps a considerable amount of it. Just how much, we don't know. But there are other rivers that are tributaries also. The cost of putting in this facility has been estimated at $7,772,000. The cost of handling the dredged material in the disposal basin after it is constructed for the most part of the material will be 13 cents a cubic yard. The cost of carrying that material to sea will be 64 cents a cubic yard.

Simple arithmetic shows me that each year that we fail to have a facility to dispose of this material cheaply as this Craney Island proposal would do, we are going to have to spend in appropriated funds 51 cents a cubic yard for every cubic yard of Government material that has to be dredged.

COST TO TAXPAYERS

If you apply that to your 3,800,000 cubic yards that have to be removed, you get almost $2 million. That is a recurring annual cost to the taxpayers of the United States.

In addition to that, there is the 800,000 cubic yards of commercial activity that would go into this facility at a toll charge. The tolls which they would pay would bring the savings to the taxpayer, plus the income to the taxpayers from the service to the local community, up to well above $2 million a year.

In 4 years' time, if we don't build this facility, the taxpayers of the United States, and out of the Federal Treasury, will pay the cost of this thing, and we still won't have it. I defy anybody to show any facility that will amortize itself so quickly and save so much money for the taxpayers. To put it off a single year, in my judgment is one of the worst mistakes we could make. That, in substance, gentleman, is the situation with which we are confronted.

Senator HOLLAND. Where is Craney Island?

Representative HARDY. Craney Island is a naval fuel facility. It is directly across the Elizabeth River from the naval operating base.

CONSTRUCTION OF DIKE

Incidentally, Senator, that brings up another point which I had intended to mention. This facility would be built by building a dike about a mile and a half square, the three sides of it, directly opposite the naval operating base and the naval air station. It would give

you an area of some 2,500 acres when it is filled up. It is estimated it would take 25 years, perhaps, to fill it. It would give you 2,500 acres of land on a 40-foot channel. While I was talking about a 35-foot channel and I don't want to start running our battleships over that as a matter of safety. But this would be a 40-foot channel which would be the most valuable industrial land imaginable, and the only possible place that the biggest naval base in the world and one of the biggest naval air stations in the world could expand. There is not any place else they could do it.

So if we are looking to the future, we would have many times the value of the total cost of this operation in the piece of land we got when we were through with it.

Senator HOLLAND. Is this close enough to be within pumping distance of most of the area where you are going to be pumping the waste from?

Representative HARDY. Some areas could be pumped directly, Senator. But we have gotten to the point now where there is very little, except in a major deepening operation, where you can pump directly. I think most of it would have to be dumped and pumped.

If there are any questions, I would be delighted to answer them. I believe that about covers the presentation I wanted to make. I wanted to give you as clear a picture of the situation as I could, but how in the world we can fail to recognize the essentiality of this proposition is beyond me.

DISCONTINUANCE OF DUMPING PERMITS

I might say one more thing: Ever since in February, Colonel Powers found it necessary to discontinue issuing permits for dumping in these holes in the harbor, I have been trying my best to get this thing cleared through the Bureau of the Budget. I had a session this morning with Mr. Hughes. I had thought until the latter part of last week that the Bureau of the Budget would certainly approve it.

NAVY DEPARTMENT RECOMMENDATION

The Navy Department very strongly recommended it as being essential in the interest of national defense. I understand the Secretary of the Army did likewise. When the Under Secretary, Mr. Earl Johnson, testified before the House Appropriations Committee, he called attention to this project and he pointed out to the committee that it had not been submitted in the budget, but that he anticipated it would be sent up by the Bureau of the Budget as a supplemental recommendation very shortly. The Appropriations Committee had been expecting to receive it.

I learned only Friday, I believe, of last week, that the Director had decided to write a letter to the Secretary of the Army, telling him that he was disapproving it because it did not comply with the policy. If anybody can show me why it does not fit this policy, it is beyond me, because it has been definitely determined to be essential and urgent in the interest of national defense. The argument we get this morning is that we think we can put it off 1 year. So what? Put it off 1 year and spend $2 million we do not need to spend? Is that economy? God knows, I am interested in economy just as much as any

other person in this Congress. But I do not see how in the world we can just throw that $2 million away and, at the same time, add an extra year to the possibility that we may have shoaling in the channel and harbor, and seriously interfere with convoys if we should find ourselves in trouble.

Thank you, gentlemen.

Senator DWORSHAK. Thank you, Congressman.

Senator HOLLAND. Would the municipalities be dumping into this area too?

AMORTIZATION PLANS

Representative HARDY. Yes. You mean the dredge material. The dredge material of all local work would go into this facility at a toll charge which is calculated to amortize the facility in a period of 22 years. It would serve the joint requirements of the military and of the civilian population.

However, I am not too concerned about this 22-year amortization proposition—it is sound from that standpoint—but I am concerned from the standpoint we are going to have to appropriate from the taxpayers' money, if we do not put it in, and we will amortize it in 4 years.

Mr. Chairman, I have with me Mr. H. M. Thompson, who is the executive vice president of the Hampton Roads Maritime Association. Of course, his everyday interest is the interest of the maritime community. I have avoided discussing the aspects of this project as it affects our normal everyday shipping, the commercial activity, because that is not the angle that the Bureau of the Budget is concerned with today, and I think their policy is proper, but I still think that this meets their criteria.

Mr. Thompson has a lot of information about this whole matter. He has worked hard and long in the public interest of the maritime community down there and has done a most effective job. I can think of no one who is more qualified to discuss this matter, particularly from the standpoint of the maritime interests, and with your permission I would like to present Mr. H. M. Thompson.

I certainly do appreciate your letting us give you this picture, Senator. I am just going to keep my fingers crossed and expect that you folks are going to include this thing in there, the Budget Bureau to the contrary notwithstanding. I am still working on them but, you know, they can be pretty hardheaded.

In that connection, Mr. Dodge told me on the phone that if this was a decision he had to make in private business he would have approved it the first day he saw it. We are going to have to do a little private-business activity up here. Thank you very much.

Senator DWORSHAK. Thank you, Congressman.

HAMPTON ROADS MARITIME ASSOCIATION

STATEMENT OF H. M. THOMPSON, EXECUTIVE VICE PRESIDENT

GENERAL STATEMENT

Mr. THOMPSON. Mr. Chairman and gentlemen, in view of the splendid presentations which have been made by our Senate representatives and our Congressmen, I thought it best to just confine

my remarks very briefly to some aspects of this thing from a commercial standpoint.

I know, of course, that you gentlemen can only consider it today from the national-defense standpoint; but, of course, you also have access to the representatives of the Army engineers who are here today, and they are far better qualified to discuss that phase of it than am I.

EFFECT ON COMMERCIAL DEVELOPMENT

What this lack of a disposal area does to our port from the commercial standpoint is to place a damper on any possible chance of any development in that area because a man who has any work to do in the port is not going to do it when he is faced with this kind of cost. Costs are very high anyway. This more than doubles the cost above even high costs, and when I tell you, sir, that in 1951 the total waterborne commerce of that port was 55 million tons, and that in that year nearly 7,000 oceangoing ships called at that port and the same number sailed, you will see that it is not a small proposition. You will see it means a great deal to a large interest.

Of course, that port must progress in keeping with the Nation's progress in the defense efforts. You have in addition to the Navy's activity, which has been strongly emphasized, of course, an Army Port of Embarkation, as you had in World War II, and it performed a valiant service there and has done splendidly in the Korean situation in supplying materials to the Mediterranean area, to North Africa, and to the islands of the Atlantic and it is a very active operation and anything that is left undone from the commercial standpoint must have its effect on those military operations.

I do not want to bore you gentlemen with a lot of details but I have a satement here I would be glad to present. It is rather lengthy.

Senator DWORSHAK. Do you want to insert that in the record?

Mr. THOMPSON. Yes.

Senator DWORSHAK. That will be done.

(The statement referred to follows:)

HAMPTON ROADS MARITIME ASSOCIATION, INC.,
Norfolk, Va., May 22, 1953.

MEMORANDUM

This memorandum is presented in support of request here submitted: That approval be given recommendation for appropriation to initiate work on the Craney Island disposal area project in Norfolk Harbor, Va.

This Craney Island disposal area project is located adjacent to and north of Craney Island in Norfolk Harbor. The project provides for disposal area of some 2,500 acres enclosed by stone-faced sand levees, 2 basins for rehandling material and approach and exit channels to the main 40-foot channel. This project is urgently needed to receive materials dredged by bucket and hopper methods in the Hampton Roads area, including the ports of Norfolk, Portsmouth, Newport News and Hampton, Va. For about 15 years or since disposal was discontinued in lower Chesapeake Bay, the material dredged by these methods, averaging 4,300,000 cubic yards annually has been deposited in the deep open waters of Hampton Roads, partially occupied by naval anchorages. Discontinuance of dumping in the present area is imperative because of progressive shoaling in the adjacent main ship channel and the naval anchorages. Such discontinuance will require long and costly hauls of material to the Atlantic Ocean off Cape Henry, unless the disposal project is constructed at Craney Island.

Periodic hydrographic surveys have disclosed that while a substantial amount of dredged material has moved with the tidal currents, the rate of fill in the dump area has been progressive to the point that the tidal prism has materially reduced. A survey in February 1952 revealed that within about 12 months the area would be filled to an elevation of 50 feet below mean low water. A tolerance of at least 5 feet must be allowed for the dumping of material and when using elevation 50 mean low water as a goal, it was anticipated that local areas would shoal to elevation 45 mean low water. To control the dumping of material to close tolerances would involve frequent costly surveys. Some solid material is going into the area and does not flatten out when dumped. These local mounds are difficult to control and would be dangerous to navigation unless kept at the proper depth.

The project, for a disposal area at Craney Island in Norfolk Harbor, is important as the channels in the Hampton Roads area are used extensively by naval vessels as well as large industries engaged in shipping products vital to the defense efforts. Delay in the completion of the project already has necessitated the transporting of dredged materials to the Atlantic Ocean at greatly increased expense and is hampering the maintenance of these important channels.

No funds for the construction of this authorized project have been appropriated by the Congress to date. Funds appropriated for planning have been sufficient to advance the project to the point where construction can be initiated without delay.

Under date of February 25, 1953, the United States district engineer at Norfolk issued a public notice addressed to "To Whom It May Concern," copy of which is attached, announcing that he would issue no more permits authorizing dumping in the Hampton Roads disposal area. Further, those parties who then held permits which had not expired and which authorized further use of the disposal area were informed that these permits would be modified to eliminate permission to use that area, etc. This, of course, requires the transportation of all material dredged from the Hampton Roads area to sea at an excessively heavy cost.

Recent estimates indicate that this additional cost of transporting dredged material to sea will range in the neighborhood of $1 million annually to the Navy, and to commercial interests the extra cost will be something in excess of $1 million per year.

We call attention to and emphasize the fact that this project as set up is a self-liquidating one, and the following detail figures are given to show the justification for the project on this basis.

The average cost of dredging in the Hampton Roads area at this time is estimated at 88 cents per cubic yard. It is further estimated that should it be necessary to transport this material to sea for dumping, the cost will be increased to $1.64 per cubic yard. With the completion of the Craney Island project, it is estimated that private firms would pay 88 cents per yard, plus 35 cents for rehandling into the basin. This item, of course, should not be charged to the project because it is returned against the cost. Therefore, the gross saving is 76 cents per cubic yard. If the 35 cents is added to the 88 cents, giving a figure of $1.33, the net saving would be 41 cents per yard. The present cost by Government hopper dredge is 14 cents a yard. To carry this material to sea to be dumped would increase the cost to 64 cents.

The previous figures showing estimated savings to the Federal Government with the completion of this project, aggregating $1.5 million a year, are based on figures supplied by the district civil engineer, Fifth Naval District, of the amount of material the Navy will require to be removed annually in order to carry on its normal operations.

In recognition of the importance of this project to naval activities in the area, the Commandant of the Fifth Naval District recommended to the Chief, Naval Operations, that the Navy Department strongly support such action as the Chief of Engineers may take to secure the necessary funds for undertaking this work.

Hampton Roads is the center of the greatest military and naval concentration in the United States. In addition to the headquarters of the Supreme Allied Commander, Atlantic, and the Commander in Chief, Atlantic Fleet, there are located here the headquarters of the Fifth Naval District; the naval supply center; United States naval hospital; United States naval shipyard; naval mine depot; Norfolk naval base; naval air station; naval amphibious base (Atlantic fleet); naval air station at Oceana; headqurters Fleet Marine Force, Atlantic; headquarters Air Forces, Atlantic Fleet; headquarters Army port of embarkation;

Army ground forces at Fort Monroe; Transportation Corps at Fort Eustis; Army air headquarters Langley Field; district headquarters, United States Army Engineers.

Commercially, Hampton Roads is a great industrial and transportation center. It takes high rank among the great seaports of the Nation. In a recent year more than 55 million tons of waterborne commerce were handled through this gateway, while 6,822 oceangoing vessels arrived, and 6,622 sailed from this great harbor.

Continued use of Hampton Roads for dumping may also contribute to the destruction of valuable oyster grounds in Hampton Roads by depositing thereon dumped material now moved by tidal currents, thus depriving this area of one of its important industries.

Inasmuch as it is estimated that it will require a minimum of 18 months to 2 years for the installation of sufficient construction to make this project usable, the need for prompt action is evident.

Therefore, in view of the extensive use of the area by the military as well as commercial interests, and as the project has been set up and recommended as a self-liquidating one, it will be seen that it will be in the interests of economy and the national welfare to provide funds to initiate work on it as early as possible.

Respectfully submitted.

HAMPTON ROADS MARITIME ASSOCIATION,
H. M. THOMPSON, *Executive Vice President.*

PUBLIC NOTICE

FEBRUARY 25, 1953.

To Whom It May Concern:

For approximately 12 years, practically all material dredged by bucket and hopper dredges in the waters serving the ports of Norfolk, Portsmouth, Newport News, and Hampton, including material dredged by the Corps of Engineers in providing and maintaining major channels, has been deposited in the open waters of Hampton Roads west of Fort Wool where the original depths varied from 60 to 95 feet. These continuous deposits, made by Government and private interests, have filled the disposal area to near capacity. For several years, hydrographic surveys of the disposal area have been made periodically to determine the rate of fill. The most recent survey of this kind, completed on February 9, 1953, indicates that the deep holes which formerly existed will be filled to the minimum allowable depth upon completion of dredge disposal operations now in progress.

In order to retain the present navigable capacity of the waters of Hampton Roads and to prevent injury to navigation, the district engineer now finds it necessary to announce that he will issue no more permits authorizing dumping in the Hampton Roads disposal area. Further, those parties who now hold permits which have not expired, and which authorize further use of the disposal area, are being informed that these permits will be modified to eliminate the permission to use that area. Those parties holding permits issued by the district engineer, the work under which is currently being prosecuted will, unless adverse conditions should arise, be permitted to continue to dump in the disposal area until the work now in progress is completed.

Most of the Government and private maritime interests in the Hampton Roads area are familiar with the project approved by Congress in July 1946 authorizing the construction of a 2,500-acre disposal area north of and adjacent to Craney Island. Until funds are made available by Congress for construction of the disposal area, including sand retaining levees, rehandling basins, rehandling plant, and appurtenances, alternate places of disposal must be utilized. Therefore, pending construction of the authorized disposal area at Craney Island, all permits to be issued by the district engineer will require that the dredged material be deposited at sea off Cape Henry, or in areas on or adjacent to the shores behind satisfactory retaining structures, if such areas are proposed by the applicants.

Any change in the present circumstances which will permit more convenient means of disposal will be brought promptly to the attention of all concerned by public notice.

W. F. POWERS,
Colonel, Corps of Engineers, District Engineer, Norfolk District.

Senator DWORSHAK. Does that complete your statement?

Mr. THOMPSON. That is all I have.

Senator DWORSHAK. We will be glad to hear you make a brief statement on this, Colonel, with respect to the national defense aspects.

NATIONAL DEFENSE FACTOR

Colonel MILNE. Mr. Chairman, you have heard the details of this particular project. I do not have to emphasize that Norfolk Harbor has two major factors: One, it is highly commercialized with over 50 million tons of commerce a year; and, secondly, it houses the largest naval establishment in the world.

As the Congressman has pointed out, our method of dredging was to free dump in the large pockets that existed in the Hampton Roads area. Unfortunately, those pockets have now filled and our latest survey of February of this past year was such that the district engineer felt he had to advise local people as well as the Navy that there would be no more dumping in Norfolk Harbor after the existing work under way this winter was completed.

I might say that as far as this project is concerned, I am only interested in the volume of dredging that the Corps of Engineers has to do because it is by far the greatest amount of work being done in Norfolk Harbor.

MAINTENANCE OF NORFOLK HARBOR

We have then only two alternatives to carry out the maintenance of Norfolk Harbor. One is to go to sea. That means a trip of 40 miles out to dump and 40 miles back. As the Congressman has pointed out, that is going to cost us 64 cents a yard by hopper dredging, and we do over 3 million yards of hopper dredging every year in that harbor and for scow-type dredging—we do some of that—it will cost us $1.60 some a yard for some 8,200 yards.

In pure dollars and cents, it is going to cost us a great deal more to maintain Norfolk Harbor beginning next year. There is no way to get around it. We have to go out to sea.

Aside from the pure dollars-and-cents viewpoint, there is another point that worries me a great deal. If we have hostilities we cannot send a hopper dredge 40 miles out into open sea with enemy submarines around. We would lose them and we cannot afford to do it, so in the event of hostilities, we would simply have to dredge Norfolk Harbor, dump the material back into areas that may have a little more depth than the 40 feet, and that material would sluff right back into the channels.

It would be a continual 24-hour-a-day operation to keep the harbor open unless we had a disposal area.

Senator ELLENDER. How far is the disposal area?

Colonel MILNE. The disposal area is right inside the Hampton Roads area, sir.

OWNERSHIP OF LAND

Senator ELLENDER. What arrangements have been made for the ownership of any land recovered?

Colonel MILNE. In accordance with the recommendations of the Corps of Engineers and approved by the Congress, the State of Virginia furnishes to the Federal Government the rights to lands for construction of the disposal area.

Senator ELLENDER. Who will own the lands thereafter, after it is filled?

Colonel MILNE. In accordance with the document, the Federal Government will own those lands.

Senator ELLENDER. That is about 2,500 acres, you said?

Representative HARDY. That is about 2,500 acres. That is very valuable land.

Senator ELLENDER. And it will require 22 years, you said to recover it?

Colonel MILNE. Based on our present rates of maintenance dredging, yes. It has been that way for the past 4 or 5 years. We are averaging a little over 4 million yards a year. There is no reason to believe that that rate is going to decrease. Based on that rate, this area would last somewhere from 22 to 25 years. If there is an increase requirement, and there may well be, the Navy may have additional requirements in that area—then of course, our annual dredging will increase and the length of the disposal area will decrease.

Senator ELLENDER. Will some of the land recovered, say, each year, or each 2 years, be usable then?

Colonel MILNE. No, sir; the entire area until it were filled would not be recovered.

Senator ELLENDER. Thank you.

Senator DWORSHAK. Thank you.

The hearing will recess until 10 o'clock Monday morning.

(Whereupon, at 3:50 p. m., Friday, May 22, 1953, the committee recessed, to reconvene at 10 a. m., Monday, May 25, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS FOR 1954

MONDAY, MAY 25, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, at 10 a. m., pursuant to recess, in room F–39, the Capitol, Hon. William F. Knowland (chairman of the subcommittee) presiding.

Present: Senators Knowland, Young, Cordon, Mundt.

CIVIL FUNCTIONS

FIRE ISLAND INLET, N. Y.

STATEMENT OF HON. STUYVESANT WAINWRIGHT II, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

PREPARED STATEMENT

Senator YOUNG (presiding). The subcommittee will come to order.

We are very happy to have you appear before the committee, and you may make any statement you wish, Congressman Wainwright.

Representative WAINWRIGHT. Thank you, Mr. Chairman.

Senator YOUNG. Do you have a prepared statement?

Representative WAINWRIGHT. I will put the prepared statement, if I may, in the record and keep my remarks short. This is what I did before the House last week.

Senator YOUNG. Fine.

Representative WAINWRIGHT. My name is Stuyvesant Wainwright. I represent the First District of New York, which is outlined on the map here before you, the boundaries of my district in Nassau County are in black.

The particular project which I am happy to discuss with you is known as Fire Island Inlet. This is the only entrance to the Great South Bay, our fine natural inland waterway. It is this inland waterway stretching 60 to 75 miles from well in to Nassau County down into the heart of Suffolk County.

Senator YOUNG. You have been working on this project for a long time, Congressman, and perhaps you will be more successful this year.

Representative WAINWRIGHT. Thank you. The Senator has been very kind. I would like to insert a statement of Senator Ives. As you know, Senator Ives is in Europe.

Senator YOUNG. We would be very happy to have it in the record.

Representative WAINWRIGHT. As you know, Senator Ives would have presented the testimony if he were here. The statement is very short, and I would like, if I may, to read it because it in effect summarizes much of what I would say.

Senator YOUNG. Yes.

STATEMENT OF SENATOR IVES

Representative WAINWRIGHT. Senator Ives' statement reads as follows:

I am submitting this statement to your distinguished group to urge the appropriation of sufficient funds for the completion of the long-delayed Fire Island Inlet project, Great South Bay, Suffolk County, Long Island. The vital need for this appropriation has been evident for a number of years and the important details of its desirability will be presented to you by the witnesses appearing today.

This evidence bears out the urgency for completion of the work as soon as possible, in order that the inlet be restored as a channel of commerce.

The sum involved is small in relation to the need. This project is not a new one, and it is most important to the defense and commerce of the area. Last year your committee approved the authorized appropriation for $228,000 for dredging in the Fire Island Inlet which, unfortunately, was eliminated in conference.

I cannot urge too strongly that you provide the necessary funds for the immediate undertaking of this important project.

That is Senator Ives' statement.

I talked to Senator Lehman a few minutes ago and Senator Lehman authorized me to say that he was wholeheartedly behind this project and supported it, which is evidence of its nonpartisanship. He would like to have the privilege of inserting remarks that will be sent in this afternoon.

Senator CORDON (presiding). If they can be here before we close the record, we will be happy to have them.

Representative WAINWRIGHT. I will tell Senator Lehman.

(The letter referred to follows:)

UNITED STATES SENATE,
Washington, D. C., May 26, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Senate Appropriations Committee, United States Senate,
Washington 25, D. C.

DEAR SENATOR KNOWLAND: Inasmuch as I could not be present at the hearings which your subcommittee held on the Fire Island Inlet project in New York State, I am taking this opportunity of expressing my deep interest in this project.

I have been acquainted with this particular project for some time. In the past I have expressed my deep concern before the appropriate committees concerning the dangerous navigation conditions existing in the inlet. The commercial value of the shipping using the inlet is of great importance to a great section of Long Island, one of the most densely populated and important defense areas in the Nation.

Knowing the present status of our Federal budget, I would be unwilling to support funds for this project now if they would merely facilitate the navigation of pleasure craft. However, the present justification for the request of funds is strongly buttressed, in my opinion, by statements of civil defense officials in the area attesting to the vital importance of the inlet in time of war.

I would greatly appreciate it if this letter would be made a part of the record of the hearings on the Fire Island Inlet project.

Yours very sincerely,

HERBERT H. LEHMAN.

Representative WAINWRIGHT. I also have a brief four-paragraph statement of my own which I would like to insert in the record and continue the remainder of my time in rather free discussion.

Senator CORDON. Without objection, that will be done.

(The statement referred to follows:)

REMARKS OF HON. STUYVESANT WAINWRIGHT II

Fire Island Inlet is situated on the south shore of Long Island about 50 miles by water south and east of the Battery, New York City. It is the main entrance into Great South Bay from the Atlantic Ocean. The existing project provides for the construction of a jetty extending generally southwest and south for a length of 5,000 feet from high ground on Democrat Point at the west end of Fire Island, and a channel 10 feet deep and 250 feet wide from deep water in the ocean to deep water within the inlet. Work under the existing project was commenced in 1939 and is about 72 percent complete. The estimated cost of the project is $834,000, exclusive of $90,190 contributed funds. An estimated amount of $240,000 is required to complete the project. Commerce during calendar year 1951 amounted to 63,900 tons through traffic. I do not have available the commerce figures for 1952 but have been informed that the traffic has been cut approximately one-half.

The existence of about five hundred fishermen depends upon the inlet being properly open. Approximately half those fishermen go out into the Atlantic Ocean each day. As the inlet is now, it is a hazardous and precarious trip twice each day. A large majority of fishermen clam, scallop, and bottom fish within the bay itself. However, because of the poor drainage, the water has become polluted and what was once a prosperous industry has now dried up to a fraction of its former self. Needless to say, boating and bathing inside the bay are unattractive due to the polluted water.

This past winter saw a very serious oil shortage in the central and western end of the Congressional District and in large parts of the Second and Third Congressional Districts. The shortage was caused by the inability of the oil tankers to get through the Fire Island Inlet. When tide and wind conditions are right certain tankers can come through but they are able to carry less than a quarter of their normal cargo. The cost of fuel oil rose in the area, despite price control, due to the situation.

The Department of the Army, the Department of the Navy, and the Department of the Air Force all have important installations on Long Island. For example; the Department of the Navy is constructing a $25 million plant at Calverton, Long Island. The cost of shipping the rock and gravel and other basic material for the runways by water would save that particular project a lot more money than the amount of the project we are seeking. The Brookhaven National Laboratory required and still requires a great deal of bulk material that can be best brought in by barge. Again, I repeat, the savings to these projects would be as great as the appropriation sought.

The Military Establishment at Camp Hero at Montauk Point recently removed 16-inch guns. These guns had to be moved in an extremely expensive manner at the cost of many hundreds of thousands of dollars. Much of the transportation cost could have been saved had those guns been loaded on barges at Shinnecock and eventually brought out at Fire Island Inlet.

The Air Force has an installation at Westhampton, Long Island, and is also vitally interested in the extension of the runway at MacArthur Airport at Islip. This is in addition to the many fields in the New York-Long Island area. It would be cheaper to supply the Air Force with fuel by water transportation, storing it in the Patchogue-Bay Shore area than by transporting it in any other manner.

The Fire Island Inlet project was approved in H. R. 5472, (Public Law 516, 81st Cong., ch. 188, 2d sess.) and is cited in section 101 as First Inlet, New York; House Document No. 762, 80th Congress.

Whereas the Fire Island Inlet Committee, composed of business and professional men representing 15 major communities along the south shore of Long Island extending from Amityville to Eastport, has for a number of years endeavored to have placed in the Federal Budget an amount of $228,000 for the purpose of modification of the existing project for Fire Island Inlet, N. Y., to provide for securing by dredging, a channel 10 feet deep and 250 feet wide from deep water in the ocean to deep water within the inlet, at an estimated

cost to the United States of $228,000 for new work and $85,000 annually for maintenance in addition to the amount now required; and

Whereas this project was approved by the 80th Congress, as outlined in House Document No. 762, dated Washington, December 10, 1948; and

Whereas this project was placed in a list of recommended items by the Subcommittee on Civil Functions of the Senate Appropriations Committee in the fall of 1952; and

Whereas this proposed dredging of the inlet is not a new project, as the existing project includes a jetty 5,000 feet long at Democrat Point which was completed by the Federal Government in 1941 at a cost of $594,355 in addition to $90,190 contributed by local interests; and

Whereas the construction of this jetty in itself was not adequate to control the shoaling of the inlet without some provision for periodic maintenance of the channel; and

Whereas the last report of the United States district engineer for New York, dated June 30, 1952, states as follows: "Existing project (adopted 1950) provides for the construction of a jetty extending generally southwest and south for a length of 5,000 feet from high ground on Democrat Point at the west end of Fire Island, and a channel 10 feet deep, 250 feet wide from deep water in the ocean to deep water within the inlet. Length about 1.2 miles. Local cooperation"; and

Whereas the United States district engineer's report further states: "The project is about 72 percent complete. The work remaining to be done consists of dredging the channel through the inlet;" and

Whereas up to this date funds have not been incorporated to the Federal budget: Therefore it is

Resolved, That the chairman of the Board of Supervisors of Suffolk County be and he is hereby authorized to express the need for urgency in completing this project to the Honorable Herbert H. Lehman, the Honorable Irving M. Ives, the Honorable Stuyvesant Wainwright, the Honorable Steven B. Derounian and the following members of the Subcommittee on Appropriations: The Honorable Glenn R. Davis, the Honorable T. Millett Hand, the Honorable Elford A. Cederberg, the Honorable Louis C. Rabaut, the Honorable John Taber, the Honorable Clarence Cannon, the Honorable John J. Riley, Brig. Gen. Bernard L. Robinson, Chairman of the Board of Engineers for Rivers and Harbors, and the Director of the Budget, to give this matter earnest and careful consideration due to the urgent necessity for maintaining a channel through Fire Island Inlet as a vital asset to the security of Long Island as an avenue of transportation of food products of all kinds, fuel and other commodities necessary for existence in the event of the bombing of New York City; for its vital commercial aspects in transporting sand, trap rock, brick, lumber, cement, coal, grains for the duck and poultry industries, in addition to gasoline, fuel, and diesel oil, which can all be transported by water at considerable saving; for the transportation of fuel by tankers which has been curtailed due to the inadequacy of the Fire Island Inlet; and for the benefit of the hundreds of commercial fishermen whose activities are seriously curtailed because of the hazardous conditions existing at Fire Island Inlet.

Representative WAINWRIGHT. I have really four main points to call to your attention. I really do not have to go into this too deeply because your committee has been gracious and generous with us in the past. My predecessor of 2 terms ago, a Republican, and my predecessor of 1 term ago, a Democrat, have all received approval of this project, in fact we fail to understand how the House is not as keenly aware of our situation as is the Senate.

Senator CORDON. Did you appear before the House?

Represenative WAINWRIGHT. Yes, sir, we appeared before the House last week.

STRATEGIC LOCATION OF INLET

First of all, and I have this map here, the strategic location of the inlet is self-evident from the fact that you have 5 main bridges here which supply Long Island. You have 1 tunnel known as the Queens-Midtown Tunnel. You have 6 strategic arifields, but in the event that you have an atomic attack on New York City and these bridges

were knocked out, you have no other means of supplying Long Island from the south or by air. I call your attention to the fact that a third of the population of New York State is actually located here on Long Island.

Senator CORDON. Where is Fire Island?

Representative WAINWRIGHT. Right here. This is the Great South Bay here, and Fire Island Inlet is here. This is the only entrance, as you can see.

What has happened, if I can point it out to you visually better than in any other fashion, this is a recent photograph which shows what has happened. This has shoaled up right across here, and the dredging project for which we seek money would eliminate this sand here and open up that inlet for passage. As its stands now, there are about 7 or 8 feet of water at high tide, at the most opportune moment.

I will say that every drop of oil that is supplied to Long Island to this area here, which has about 6 million people, comes in by water. There is not any railed in. This whole area from here out, which covers about 500,000 people——

Senator CORDON. You do not mean that the oil comes through that inlet?

Representative WAINWRIGHT. No, I do not; but that it comes in by water in one form or another.

Senator CORDON. What does come in, in that inlet, small craft?

Representative WAINWRIGHT. At the present time small craft. Until about 3 years ago the oil tankers that supply the oil for the balance of this area, too.

AUTHORIZED DEPTH

Senator CORDON. What is the authorized depth for the channel of the inlet?

Representative WAINWRIGHT. The authorized depth is 10 feet. At the present time it is about 7. In actuality, if the dredging project were allowed, it would make a passage of about 12 feet because as I show you on the photograph, it is just that particular area which has shoaled up. The oil storage areas are in here, here is a town called Bay Shore and another called Patchogue that have adequate storage facilities for this whole area.

Senator CORDON. Just so that I get an idea of the location, where is Idlewild Airport?

Representative WAINWRIGHT. Right here, sir.

Senator CORDON. Thank you.

Rpresentative WAINWRIGHT. This is Nassau County in here, and Suffolk County out here, and La Guardia up here. At the present time the oil tankers are coming through there about 22 or 23 percent full, but as it is still the most economical way to bring the oil into this area, they are coming through the passage when it is available. They would be able to come in fully loaded with the appropriation allowed.

Despite the price control, the cost of oil in this area went up this year due to the fact that there was a distinct oil shortage this winter in the area.

Senator CORDON. It is an interesting situation to me that when transportation gets difficult and we aid transportation, nevertheless it never seems to go down.

PARTIAL COMPLETION

Representative WAINWRIGHT. I wanted to point up in a couple of minutes, the time I have remaining, that this project is an old one, I mean it was in 1937 when it was originally authorized. It is about 72 percent completed, but it is like authorization funds for the building of a hospital and then not having sufficient funds to put the roof on. The hospital is no good.

The same might apply to this project. There has been about $700,000 put into this project at the present time, and it is practically useless. I know there are a lot of projects in the same category. But 500 fishermen, commercial fishermen, whose livelihoods depend on this inlet, don't understand why we haven't succeeded. I don't, either.

I also point out that it is not a new project to overcome the Eisenhower objection to starting a new project at this time.

Finally, in addition to the defense and civilian needs, I would point out that had the House been intelligent enough to authorize this project 3 years ago, each of the armed services would have saved by transportation costs alone more than the authorized amount; in other word, three times the authorized amount. The Navy is building a $25-million jet aircraft plant here at Calvert. The cost of hauling the material for the runways for that project could have been brought in here; the gravel and other materials used came down the Hudson River all this way.

The cost of water shipping through this inlet and right up to the project itself would have saved more than the $228,000, the piddling amount that we are seeking. In fact, I have an unofficial estimate that it would have saved nearly $1 million just for that one project.

We also have in this area the Brookhaven Atomic Laboratory which, had this been opened up, would have saved money.

Oil shipments to the Air Force, which has a base at West Hampton Beach, you have the same situation. In other words, gentlemen, I hope you will agree with me that if you restore this as you have done in the past that you will be doing a great thing not just for this particular area. I have received support from every single Congressman in New York State on this project.

I also have indications that this year the chairman may see fit to hold it in conference if I am so fortunate here before you today.

Thank you very much.

Senator CORDON. The committee has received a letter from Mr. Leslie Weiss, chairman of the Fire Island Inlet Committee, and a telegram from the board of trustees of the village of Patchogue. These communications will be inserted in the record at this point.

(The communications referred to follow:)

FIRE ISLAND INLET COMMITTEE,
Patchogue, Long Island, May 11, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Civil Functions Subcommittee,
Senate Office Building, Washington, D. C.

DEAR MR. KNOWLAND: The long-range survival of Long Island people is dependent upon three important factors:

1. The defense of the island against enemy attack;
2. The continuation of its natural resource industries and the development of new industries;
3. Adequate transportation facilities.

Restoring Fire Island Inlet as a navigable channel will help to fulfill these three requirements.

In the enclosed 4 letters you will find the studied opinions of 4 experts concerning the need for dredging Fire Island Inlet. These letters were written by—

1. Suffolk County director of civil defense, Sheriff William McCollom;
2. Executive director of the Long Island Commercial Fishermen's Association, Nicholas Griek;
3. General manager of the Patchogue Oil Terminal Corp., A. T. Soule;
4. Vice president of the New York Trap Rock Corp., G. M. Boyle.

If you could personally visit this area and inspect the inlet, we are sure you would agree that there should be no further delay in dredging this vital channel of defense and commerce.

Yours very truly,

LESLIE WEISS, *Chairman.*

SUFFOLK COUNTY, OFFICE OF CIVIL DEFENSE,
Riverhead, N. Y., February 26, 1951.

Mr. LESLIE WEISS,
Long Island Association, Pelco,
Patchogue, N. Y.

DEAR LES: I have been reading with a great deal of interest the current discussion regarding the proposed improvement of Fire Island Inlet, and I am interested in this for many reasons:

No. 1. As director of civil defense for Suffolk County, I realize that one of our outstanding problems and responsibilities in case of an attack on the metropolitan area would be transportation. Supplies of all descriptions come to us almost daily from or through New York City.

No. 2. It will be the responsibility of the civil-defense organization in Suffolk County to provide shelter, food, medical supplies, clothing, and other items of human need in case of any disaster happening in the metropolitan area. It may be necessary to evacuate a large segment of its population, many of whom would require hospitalization in some form, and with the disorganization of our supply lines we may have to resort to waterborne transportation.

No. 3. Fire Island Inlet offers the only means for boats of reasonable draft to enter the Great South Bay which could be used as an avenue of supply for the entire western section of Suffolk County on the south shore, as the only harbor on the south shore is Montauk Point, 125 miles from New York City.

No. 4. It is quite evident to anyone who has studied the problem facing Suffolk County what a tremendous responsibility we would have in the event of an attack upon the metropolitan area. Evacuees by the thousands, food requirements with very little reserve storage in the county, fuel of all descriptions, medical supplies, emergency clothing, etc. We have the shelter, but if the motor transportation is disrupted and the railroads are rendered impotent, we must have help from other sources and waterborne supplies would be of inestimable value.

No. 5. From a layman's point of view, it would seem that the dredging of Fire Island Inlet to afford protection in the Great South Bay for military craft, would be a definite advantage in the guarding and protection of our coastline.

No. 6. The commercial offshore fishing fleet which now uses the Fire Island Inlet to and from the fishing grounds find it becoming considerably more dangerous. This entails a real source of food supply which, in case of need, would be of great value. Even under normal circumstances commercial fishing should be encouraged and have proper facilities to get to and from their fishing grounds, also to have refuge in the event of a storm, and certainly Fire Island Inlet is very difficult to negotiate even under favorable conditions.

No. 7. The south shore of Long Island is the only coastline enjoyed by the State of New York, and it would seem to me that its natural advantages should be maintained and should be the responsibility of both the State and Federal Government to maintain all natural channels that can accommodate craft of any reasonable size, for the protection of life and property.

No. 8. All one has to do is to examine any of the old maps to realize that if protection is not provided and proper maintenance of our natural inlets is not given their value will be lost, as they will be overlapped to a point where our natural bays will be practically landlocked.

I hope you may be successful in securing the services of the Government in the necessary dredging to improve the entrance to the Great South Bay, which could be used as a supply element in case of need, and its proper maintenance should be encouraged in every way.

Any help that I can render in this matter, I will be most happy to do.

Sincerely yours,

WILLIAM C. MCCOLLOM, *Director.*

LONG ISLAND FISHERMEN'S ASSOCIATION,
West Sayville, Long Island, N. Y., April 21, 1953.

Hon. STUYVESANT WAINWRIGHT,
House Office Building,
Washington, D. C.

DEAR MR. WAINWRIGHT: For several years we of the Long Island Fishermen's Association have urgently requested that some action be taken to dredge Fire Island Inlet to provide safe passage to the commercial fishing vessels in their daily trips to and from the Atlantic Ocean. The skippers of some 50 commercial vessels have had to contend with the hazardous conditions encountered in the inlet as a result of the constant shoaling which has taken place during the last few years. You may recall that last year 2 men lost their lives when 1 of these vessels was grounded on a bar in the inlet.

If this condition continues, and indications are that it will, the commercial fishing fleet will be unable to operate regularly or efficiently. Consequently, the production of the necessary seafood will be drastically reduced. The 50 commercial vessels which make their daily trips to and from the Atlantic Ocean carry 120 men and produce approximately 7,500,000 pounds of finny fish and 750,000 pounds of shellfish annually.

Retail fish markets depend on Fire Island production. Truckers, grocers, ice plants, fuel and oil distributors, cooperage firms, net manufacturers, paint and net preservative companies, mechanics, shipyards and ship chandlers all would suffer considerable losses should Fire Island Inlet remain in its present condition. Wholesale fish markets in New York, Baltimore, and Philadelphia could ill afford to lose the fish carried through the inlet.

It is difficult to tell the number of men actually affected by Fire Island Inlet. A fair estimate is well over 3,000 persons. This means, of course, persons who are wholly or partially dependent upon fish, and fish only, which are transported through the inlet.

I also want to call your attention to the importance of this fishing fleet in the defense of our country, as demonstrated during the last war. Because the Navy felt that these fishing vessels could be advantageously used as an advance guard against enemy submarines, it supplied each vessel with sealed radiotelephones to be used if and when suspicious craft were sighted. In this manner the fishermen gave important information to the Coast Guard and the Navy, and, in one case, one of our fleet saved some 20 persons from a watery grave when their cargo ship was torpedoed by the enemy.

The commercial fisherman is always ready and willing to aid his country against any foe. However, he cannot perform this valuable service unless the Federal Government provides adequate inlets permitting the free access of these vessels to the Atlantic Ocean.

The small sum of $228,000 needed to carry on the proper maintenance of the inlet certainly should not stand in the way of providing an improvement so necessary to the production of food and to the defense of our Nation.

When we appeared before the House committee 2 years ago we found the committee very sympathetic to our problem, but were told that no money was being appropriated for new projects. We tried to impress the committee with the fact that Fire Island Inlet was not a new project and that originally, when the jetty was constructed, the project provided for a maintenance fund of $25,000 annually. Insofar as we can determine, this money was not spent in the manner designated.

We urge you to do everything within your power to obtain the necessary amount of money from the emergency fund to begin dredging operations immediately.

Very truly yours,

NICHOLAS W. GRIEK,
Executive Secretary.

COPY OF COMMENTS ADDED TO SURVEY FORM SUBMITTED TO SUFFOLK COUNTY AIR FORCE BASE, PETROLEUM SECTION, CONCERNING PETROLEUM STORAGE LOCATED AT PATCHOGUE, LONG ISLAND

The above-mentioned storage of 4,300,000 gallons for clean petroleum products is advantageously situated to be of service to the United States Air Force in the event of an emergency. Our terminal is equipped with modern loading facilities and since it is only 22 miles from the Suffolk County Air Base, it would afford excellent standby facilities for your purposes.

This terminal is now supplied by self-propelled tankers moving product from the New York harbor area. Its efficiency is seriously impaired, however, by the restricting depth of the Fire Island Inlet, the only waterway through which product can be delivered to the storage tanks.

Due to the shoaling of Fire Island Inlet, tankers can move product to this tankage at only 53 percent of their normal carrying capacity. A self-propelled tanker, under the most favorable conditions of weather, wind, and tide, can carry only 125,000 gallons through the inlet. This same tanker could carry 235,000 gallons each trip if the inlet was improved to the depths as authorized under House of Representatives Document No. 762 and approved by the Corps of Engineers, United States Army, in 1948.

We feel that this location, because of its proximity to your existing facilities, could prove of great value to the Air Force in the event of an emergency. Its value for your purposes, however, could be greatly enhanced if the access to the terminal through the Fire Island Inlet could be improved. Any efforts along this direction that the Air Force can exert will be greatly appreciated. The Fire Island Inlet Committee, Patchogue Hotel, Patchogue, Long Island, will be glad to provide you with the details of the plans and what has been done concerning improvement of Fire Island Inlet channel.

PATCHOGUE OIL TERMINAL CORP.,
ARTHUR T. SOULE, *General Manager.*

NEW YORK TRAP ROCK CORP.,
New York 17, N. Y., March 6, 1951.

CHIEF OF ENGINEERS, UNITED STATES ARMY,
Washington 25, D. C.

DEAR SIR: We write to ask your favorable consideration of that part of River and Harbor Act (H. R. 5472, Public Law 516) which has to do with Fire Island Inlet, N. Y., covered by the report of the Secretary of the Army to the House of Representatives (Doc. H. R. 762).

New York Trap Rock Corp. is engaged in the production of crushed or broken stone at quarries and plants on the shores of the Hudson River. Crushed stone is one of the most important types of coarse aggregate, and this corporation is one of the principal producers thereof with plants so located as to make possible economical water delivery to Long Island.

Heretofore it has been possible adequately to serve construction and road-building projects on the island by making deliveries at points on the north shore of the island or at points on Jamaica Bay. But the rapid developments now underway in the southern and eastern parts of Nassau County and in Suffolk County cannot be efficiently or economically serviced from those points. Coarse aggregates in large quantities and at reasonable prices are, however, essential for these developments.

It is therefore necessary that one or more distributing depots for this material be established along the great South Bay, at Patchogue certainly, and probably at other places as the needs of the growing communities may indicate. This is not feasible under present navigational conditions. There is sufficient depth of water in the South Bay itself, but there is no way now provided for getting into the bay. Unless such an entrance is opened up, the development of the eastern part of Long Island will be retarded or will go forward at unduly high costs.

The development of Fire Island Inlet is clearly the readiest means of solving the difficulty. We urge that the recommendation of the Army engineers in the matter be followed.

This letter is written from the point of view of the producer of a single—though essential—commodity. But what is true as to us is true also as to others. The growth and prosperity of these communities will be tremendously benefited if

transportation facilities on the bay, whether for pleasure or for commerce, can have ready access to open water. Nor is it difficult to appreciate that in operation of war or of defense easy access to and exit from the bay might be of very great moment.

Respectfully,

NEW YORK TRAP ROCK CORP.,
G. M. BOYLE, *Vice President.*

PATCHOGUE, N. Y., *February 3, 1953.*

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee,
Senate Office Building:

Failure to release funds for the Fire Island Inlet has caused critical shortage of fuel oil and gasoline in greater Patchogue area. The Board of Trustees of the Village of Patchogue earnestly desires that action be expedited on dredging and stabilizing this inlet in accordance with plans heretofore adopted by the United States Army Corps of Engineers. Consider such action absolutely essential to economic well-being of south shore of Long Island.

Respectfully,

BOARD OF TRUSTEES, VILLAGE OF PATCHOGUE.

Senator KNOWLAND. We have with us the Honorable Douglas McKay, Secretary of the Interior. Mr. Secretary, we are glad to have you before the Civil Functions Subcommittee, both as the new Secretary of the Department of Interior and also as a neighbor from an adjacent State.

COLUMBIA RIVER PROJECTS

STATEMENT OF HON. DOUGLAS McKAY, SECRETARY, DEPARTMENT OF THE INTERIOR, WASHINGTON, D. C.

GENERAL STATEMENT

Secretary MCKAY. My object in coming here today is the same as when I came here last year as Governor of the State of Oregon to ask for the restoration of funds that were deleted in the House for projects on the Columbia River. As you are well aware, we faced a terrific power shortage last year because of the shortage of water. We never know what the water situation will be from year to year. It is very important that these projects be finished as quickly as possible because after all they are self-liquidating projects.

So the sooner we get to selling power from these projects, the sooner the Government will be reimbursed for the money they have invested in them.

There is one thing I would like to make very specific today, unnecessary from the standpoint of you gentlemen because you are well acquainted with it, all these projects are self-liquidating projects. First we have the Chief Joseph with 1,150,000 kilowatts; the McNary, 150,000 kilowatts; and the Dalles, 119,000 kilowatts. That is the initial installed generating capacity of those dams through 1959.

FUTURE POWER SHORTAGE

Now the charts can be presented, I guess you are familiar with them. This power shortage will continue in the Northwest through 1959 or 1960 perhaps, and even then if there are not some new starts made in the next year or two we will be facing a more severe shortage

in 1960. You might be interested in a meeting I had in my office between members of power companies, both privately owned and municipally owned, from Seattle. They all agreed that if something is not done about the ultimate increase in the amount of generating capacity about 10 years from now there will not be any power for the private-power companies because the public-preference clause would take it away.

That has nothing to do with this story, but I want to point out that we have a long-haul program for the next 10 or 20 years to develop the Columbia River. It would be very sad, I think now, for the Army engineers to be restricted because this will probably result in a year's delay in the ultimate production of power at those dams.

Senator YOUNG. What percent of this power will be firm power?

Secretary MCKAY. I cannot answer that question. A high percentage of it is, of course, during the fall in the slack-water period. The generators will be down. That is the reason we need very badly additional upriver storage. These gentlemen in my office a week ago agreed that upriver storage would increase by 1 million kilowatts the generation downstream. That is figuring The Dalles and McNary finished.

At the present time the only thing downstream is Bonneville, which is about 500,000 kilowatts.

Senator CORDON. May I interrupt?

Secretary MCKAY. Yes.

Senator CORDON. If you had storage on the Columbia in the area where it leaves the United States and goes to Canada or in the area where it swings back into the United States, then you would have storage that would aid also at Grand Coulee?

Secretary MCKAY. Yes, sir.

Senator CORDON. And at Grand Island and at Chief Joseph?

LIBBY PROJECT

Secretary MCKAY. Yes. That is the reason I think the project at Libby is probably the most important project in the Northwest because it is a reasonable cost, and it firms up the Columbia River upstream as well as the lower Columbia. At the present time the only thing on the lower Columbia is Bonneville.

The Snake River, for instance, ultimately would firm up McNary and The Dalles, but Libby would firm up all of them.

Senator KNOWLAND. Do you feel, Mr. Secretary, that in addition to meeting normal needs of this growing area in the Northwest that also the defense needs 5 years from now or 10 years from now might be almost critical without adequate power?

Secretary MCKAY. Yes, sir. Senator Knowland, this last year, of course, the aluminum plants were cut out of their interruptible power, and most people were curtailed some. I cannot say as to the amount in aluminum, but there was some. If we get another critical year of water shortage, we would be in the same mess.

Senator KNOWLAND. How long since you have had a brownout in the Northwest area?

VOLUNTARY BROWNOUT

Secretary McKay. Well, you have me off balance there. Anyway, last year we curtailed and we handled it by voluntary curtailment. There were no regulations, but all business houses, for instance, were asked to shut off their neon signs, which is largely psychological because they do not burn much juice. When those people are cutting off their electric signs, that indicates to other people that they should be curtailing. So it was largely a brownout last year, but on a voluntary basis.

Senator Cordon. I think they had the same type of voluntary brownout the year before. Last year there was a mandatory reduction in commercial use for awhile. Of course, that was even in connection with the purchase of all available power and the operation of every type of generation that they could find in the area that ordinarily is not committeed to the pool at all.

LOW GENERATING COSTS

Senator Young. What is the cost of generating power in these various dams? As I recall it, it is among the lowest in the United States. Do you have those figures?

Secretary McKay. I would refer that to the Army engineers, but it is the lowest generating cost in the United States.

Another thing, approximately 40 percent of the potential hydro in America is in the Columbia Basin. During World War II the aluminum companies in this area produced between 35 and 40 percent of all the aluminum that was produced in America for defense, for the war. So that this is an area that should be exploited because it is the natural for hydro. Some States have coal, some have oil, some have iron, which we do not happen to have in the West in any paying quantities, but we do have the greatest hydro in the United States. So I am very anxious that the Government should carry their share of the load in the development of this, not on the basis of a grant with the States out there, but on the basis where it will be liquidated by the profits. Bonneville Administration is running at the present time very good, the returns for the money invested.

Now the thing is so big, I, of course, have made some decisions that some people did not like, but I say it is probably so big that it takes the combined efforts of the Federal Government, the local communities, and the private utilities to do the job.

Senator Young. I wonder if the engineers would have the comparative figures on the cost per kilowatt as against the TVA and the Missouri area?

Colonel Milne. Senator, I can make an approximation. The Dalles will run approximately 2 mills. Some of the other projects in the Northwest are less than that amount. The cost of power in the Missouri project will run around 4 mills per kilowatt-hour. The new steam plants that TVA is building in the TVA approximate 3½ mills.

Senator Young. How about hydroelectric?

Colonel Milne. Their hydro was built sometime ago when costs were less and might compare as we did with Bonneville. Bonneville runs around seven-tenths or eight-tenths of a mill. I think TVA was built around the same time; I have heard a figure of 1.8 mills.

Senator YOUNG. Thank you.

Senator KNOWLAND. Thank you, Mr. Secretary; we appreciate your presentation.

Secretary MCKAY. Thank you for allowing me to come.

Senator KNOWLAND. I have a statement here in opposition to Table Rock Dam, which was prepared by Mr. Charles H. Callison, Conservation Director of the National Wildlife Federation of Washington, D. C. The statement will go into the record at this point.

(The statement referred to follows:)

STATEMENT BY CHARLES H. CALLISON, CONSERVATION DIRECTOR, NATIONAL WILDLIFE FEDERATION, WASHINGTON, D. C., OPPOSING APPROPRIATIONS FOR TABLE ROCK DAM

There are a number of good reasons why proposed Table Rock Dam on the White River in Missouri should not be constructed. This type structure does not represent a sound approach to comprehensive watershed development and flood control; the purported need for the electric power it would produce does not exist, especially in view of alternate sources of power that could be developed; and at best the whole project is of very, very dubious economic soundness. These points have been covered by other witnesses appearing before this committee and I shall subscribe to what they said without elaborating or duplicating their testimony.

Briefly I should like to point out to this committee another powerful reason why Table Rock Dam should not be built. This project would destroy unique scenic and recreational resources which cannot be measured fairly in economic terms, but which, because of their rarity and the increasing public need for them, must not be ignored in the planning and execution of any kind of development for the upper White and James Rivers in the Ozarks.

The upper White River in Missouri and Arkansas, including its tributary, the James River, is one of the natural, clear-water streams of the Ozarks which enjoy nationwide popularity and patronage for a unique kind of fishing sport. The White ranks with the famous Current River as a float-fishing stream par excellence. Here clean, cool water flowing swiftly over rocky holes and boulder-studdied riffles and the forested Ozark hill scenery contribute as much to the charm of the sport as the fishing. Many would rate the White as the No. 1 float-fishing stream of the Nation, with the Current relegated to No. 2 place. State conservation officials have creel-census figures to show that the White actually is more productive of smallmouth bass than the Current. Each stream has its own peculiar scenic assets, although they are similar, and each has its own enthusiastic partisans.

That portion of the White which would be impounded by Table Rock Dam flows through one of the most famous tourist and recreational areas of the Ozarks. This is the Shepherd of the Hills Country, first popularized by the Harold Bell Wright novel. This rugged country owes much of its character and charm to the unspoiled streams which drain it, and an essential part of this charm would be lost forever were the valley to become an artificial reservoir.

Former Gov. Forrest Smith, of Missouri, in a statement of October 12, 1949, in which he expressed the unanimous protest of his office and of all interested State agencies against proposed dams on the Current River, said this:

"There are streams with natural attributes which, in their total, are so unique as to warrant the preservation of the streams, simply because they are unique."

Governor Smith was applying this principle to the Current River. It applies with equal pertinence, I think, to the upper White River of Missouri and Arkansas.

The upper White is a small stream. It doesn't carry a great deal of water. As hydroelectric dams go, Table Rock would be a relatively small project. But if it were the only source of electricity in a power-short area, then the power consideration might outweigh all others. But this isn't the case. In this Midwestern region, in this particular area, there are abundant and easily accessible supplies of mineral fuel for production of electric power.

There is no foreseeable shortage of coal in the area, gentlemen. There is, however, a very definite shortage of streams like the upper White River.

The National Wildlife Federation will not be drawn into any controversy between public power and private power. There is a fundamental conservation problem involved here. If it is bad management of natural resources for the Government to build a dam on the upper White River, it would be equally bad management for private enterprise to build it. Whoever ultimately constructs the generating plants needed to provide energy for the growing industry and cities and farms of this four-State area—Missouri, Arkansas, Kansas, and Oklahoma—whether the Government or private enterprise builds them, we contend it would be far better for all concerned to utilize coal or diesel fuel, and thereby save this beautiful Ozark stream for future Americans to know and enjoy.

Fortunately, we have a choice here, gentlemen. We can produce the power as cheaply in other ways, and we can save the White River.

I sincerely hope you will resist all pressures to include in this appropriation bill any funds for Table Rock Dam, and I trust that in due time Congress will see fit to strike Table Rock entirely from the list of authorized projects.

Senator KNOWLAND. Next we have Mr. Herbert G. West, executive vice president, Inland Empire Waterways Association.

Mr. WEST. Mr. Chairman, with your permission I would like to have the witneses appear in the order we have given.

Senator KNOWLAND. All right. We are operating under the 5-minute rule, and the full statements may go in the record, and then they can summarize if they wish.

Mr. WEST. All of our statements have been filed with the committee, sir.

Senator KNOWLAND. Mr. Baker?

I might say that Senator Magnuson indicated that he would have liked being heer today, but he is out on official business at the present time for the Senate. Otherwise he would have been present.

INLAND EMPIRE WATERWAYS ASSOCIATION

STATEMENT OF CHARLES F. BAKER, PRESIDENT

GENERAL STATEMENT

Mr. BAKER. Mr. Chairman and members of the committee, my name is Charles Baker; I am general manager of the Pacific Supply Cooperative, a large farm wholesale and marketing organization serving some 75,000 farmers in the States of Oregon, Washington, and Idaho, and also president of the National Cooperatives, which in turn serves some 20 large farm cooperatives throughout America.

In addition to that I am president of the Inland Empire Waterways Association, which is an organization supported voluntarily by business interests, farm groups, chambers of commerce, port districts, county ports, and so forth, in the Northwest who are vitally interested in the maximum development of water resources of the Columbia and Snake Rivers.

DEVELOPMENT OF WATER RESOURCES

We have made great progress in the last few years in starting to develop these water resources. The effect upon the economy of the Northwest and the Nation as a whole has been very great even though we have only made relatively small progress in obtaining maximum development. We have seen a great growth in the use of electric power by individuals going up from 1,700 kilowatts to as much as five- and six-thousand kilowatts. We have seen a corresponding reduction in the cost to consumers, almost cut in half both by public and private agencies.

Even though the tax rates have gone up terrifically the earnings of people engaged in distribution have increased greatly. The consumption is so great in the Northwest by present people using the power both industrially and in the homes that practically everyone in the distribution field agrees that they must have from three- to five-thousand kilowatts of new generating capacity each year to take care of just the normal growth.

RECENT POWER SHORTAGE

Now we have been confronted with brownouts and a very serious power shortage last winter. There is not anything to indicate but what it is going to be even more severe in the future unless we get new starts constantly coming along. We have only developed probably 10 to 15 percent of our potential hydro in the Northwest, and we feel that the Northwest region will consume every kilowatt faster than we can bring new developments along.

I think we ought to point out, too, at this time that we believe these new starts are vitally essential on the part of the Federal Government even though private agencies, public agencies, are doing everything they can to increase their own generating capacities. It would appear that at least 50 percent of the generating capacity in the Northwest will come from great multiple-purpose dams or maybe even a greater percentage as time goes on.

So it seems to us in the Northwest that the Federal Government must pay a continuing heed to developing the Snake River. After all, this is probably the greatest single resource that the Northwest has with maximum development. We know, of course, the need for efficiency in government and cutting costs of government. We deeply appreciate that as taxpayers, but we do believe that these new starts which are reimbursable, for which power on a basis of 50 years, from our experience, will return to the Government all of the cost of the development program plus interest. We feel that is a sound investment and not an expense item, and we believe it will contribute immeasurably to the economy of the country as well as playing a very prominent part from the standpoint of national defense.

Because of these very basic reasons we are back here urging that we have a new start on Ice Harbor Dam, on which planning has been completed and on which construction could be begun at once. It will play a very basic part in the future economy of the region, and we do sincerely hope that funds can be provided at this session of the Congress to start Ice Harbor on its way.

Senator KNOWLAND. Your statement will be included in the record.

(The statement referred to follows:)

STATEMENT OF CHARLES F. BAKER, PRESIDENT, INLAND EMPIRE WATERWAYS ASSOCIATION, ON ICE HARBOR DAM ON THE SNAKE RIVER

Almost half a century has passed since the great President, Theodore Roosevelt, in a letter to the Congress of the United States, called attention to the importance to the welfare of America of conserving our great resources, particularly the water resources of our great river systems, and the part which he felt the Federal Government should play in preserving and obtaining maximum development of these great water resources in the interest of the people of the United States.

Time has proven that his views on this matter were constructive, sound, and in the public interest, and I deem it proper to present at this time excerpts from his letter under date of February 26, 1908, to the Congress, and I quote:

"Our river systems are better adapted to the needs of the people than those of any other country. In extent, distribution, navigability, and ease of use, they stand first. Yet the rivers of no other civilized country are so poorly developed, so little used, or play so small a part in the industrial life of the Nation as those of the United States. In view of the use made of rivers elsewhere, the failure to use our own is astonishing, and no thoughtful man can believe that it will last.

"The report rests throughout on the fundamental conception that every waterway should be made to serve the people as largely and in as many different way as possible. It is poor business to develop a river for navigation in such a way as to prevent its use for power, when by a little foresight it could be made to serve both purposes. We cannot afford needlessly to sacrifice power to irrigation, or irrigation to domestic water supply, when by taking thought we may have all three. Every stream should be used to the utmost. No stream can be so used unless such use is planned for in advance. When such plans are made we shall find that, instead of interfering, one use can often be made to assist another. Each river system, from its headwaters in the forest to its mouth on the coast, is a single unit and should be treated as such. Navigation of the lower reaches of a stream cannot be fully developed without the control of floods and low waters by storage and drainage. Navigable channels are directly concerned with the protection of source waters and with soil erosion, which takes the materials for bars and shoals from the richest portions of our farms. The uses of a stream for domestic and municipal water supply, for power, and in many cases for irrigation, must also be taken into full account.

"The national Government must play the leading part in securing the largest possible use of our waterways; other agencies can assist and should assist, but the work is essentially national in its scope.

"The report justly calls attention to the fact that hitherto our national policy has been one of almost unrestricted disposition and waste of natural resources, and emphasizes the fundamental necessity for conserving these resources upon which our present and future success as a nation primarily rests. Running water is a most valuable natural asset of the people, and there is urgent need for conserving it for navigation, for power, for irrigation, and for domestic and municipal supply.

"The need for the developing of the Pacific coast rivers is not less pressing. Our people are united in support of the immediate adoption of a progressive policy of inland waterway development.

"The improvement of our inland waterways can and should be made to pay for itself so far as practicable from the incidental proceeds from waterpower an other uses. Navigation should, of course, be free. But the greatest return will come from the increased commerce, growth, and prosperity of our people. For this we have already waited too long. Adequate funds should be provided, by bond issue, if necessary, and the work should be delayed on longer. The development of our waterways and the conservation of our forests are the two most pressing physical needs of the country. They are interdependent, and they should be met vigorously, together, and at once. The questions of organization, powers, and appropriations are now before the Congress. There is urgent need for prompt and decisive action."

THEODORE ROOSEVELT.

THE WHITE HOUSE, *February 26, 1908.*

The Corps of Army Engineers during the last 20 years, under the instructions from the Senate of the United States, made a careful survey of the water resources of the Columbia and Snake Rivers in the Pacific Northwest; first under the 308 report, and later in 1946 under the 308 supplemental report, wherein they reemphasized the basic potential possibilities which the conservation and maximum development of the great water resources of these rivers will give the people of this country.

The Bonneville Power Administration, which was created under authority of the Congress of the United States during the last 20 years, and strongly urged and supported by the late great Senator, Charles L. McNary, of Oregon, has developed a great grid system under the postage-stamp rate, bringing low cost hydroelectric power to many communities in the States of Oregon and Washington, which has in turn added greatly to the economic wealth of these communities,

and the Nation as a whole through the new electrochemical and electrometallurgical industries which have established themselves in the Pacific Northwest and added greatly to the prosperity of the area. Some idea of the amazing growth and development of the area as result of the great quantities of hydroelectric power available from Bonneville and Grand Coulee Dams can be gained from the following statistical information showing the great growth in the last dozen years in the volume of business, the net earnings of the private utilities in the Pacific Northwest, together with the tremendous increase in the use of electricity by the consumer and with a corresponding reduction in cost to the consumer of the area on power used, whether it came from municipalities, public utility districts, or from private utilities:

In 1938 the private utilities of the western group of the northwest power pool (Portland General Electric, Pudget Sound Power & Light, Washington Water Power, and Pacific Power & Light) realized a net income for the 4 companies of $6,441,162. Taxes charged amounted to $6,691,517. Their residential cost per kilowatt-hour averaged 2.64.

In 1948 the same group of 4 had a total net income of $12,145,206. Taxes charged were $17,303,899. Cost per kilowatt-hour (residential) averaged 1.36.

In 1949 the 4 showed an income after taxes of $11,718,636; in 1950 an income after taxes of $14,125,921.

The percent of increase in taxes 1938–48 was 163.3 percent.

The percent increase in income 1938–48 was 90.5 percent.

In 1941 the average kilowatt-hour use per customer in Oregon and Washington was 1,776. By 1950 the average had climbed to 5,025, an increase of 341 percent.

A TYPICAL PRIVATE UTILITY SUCCESS STORY

An examination of the operation of a typical private utility member of the northwest power pool shows (from annual report):

An increase in net income for 1952 over 1951 of 22.7 percent.

An increase in total operating revenues for 1952 over 1951 of 14.3 percent.

An increase in sales of electric energy to general business customers for 1952 over 1951 of 8.4 percent.

An increase in average annual use by residential customers for 1952 over 1951 of 8 percent.

A decrease for residential service charges in 1952 as compared with 1951 (including temporary surcharge) to 1.38 from 1.40. Excluding surcharges, the company's average price was 1.36 in 1952.

NOTE.—In 1938 this company paid a total of $1,439,608 in taxes. In 1948 taxes were $2,626,481.

In 1938, with a high residential rate per kilowatt-hour and low consumer consumption, this company showed a net income of $1,352,162. In 1952, when residential rates had decreased more than 50 percent, the net income was $4,413,702.

The record speaks for itself.

One of the largest municipalities in the Pacific Northwest had, in 1935, an annual average per customer use of power of 1,550 kilowatt-hours at a cost of 1.58. In 1951 average use had risen to 6,730 kilowatt-hours at 94 cents.

A typical Pacific Northwest PUD in 1946 had an average per customer use of 3,297 kilowatt hour at 1.40. By 1951 this had risen to 5,647 kilowatt-hours and charges had decreased to 1.22.

For the past 3 years, the area has faced an actute shortage of electric power. We have been confronted with brownouts, and with the rationing of power and the cutting off of some of our basic industries because of power shortage.

The normal growth in consumption, without inviting any new industries to the area requires the addition of at least one-half million kilowatts of power annually, according to the testimony of responsible officials in both public agencies and private utilities operating in the area to meet the rapidly growing demand of the region. This does not take into consideration any new industries coming to the area.

Both public and private agencies are making every effort to increase the hydroelectric capacity of their various systems but the very nature of our economy in the Pacific Northwest makes it imperative that the Federal Government must continue to be an important factor in bringing about the development of increased quantities of hydroelectric power in the area if we are to meet our needs and expand our economy in the public interest of the region and the Nation as a whole. To meet this goal, it seems imperative that the Federal Government must constantly add new starts on the Columbia River system of great multipurpose dams in order to enable us to meet this situation.

Even with the new dams presently under construction at McNary, Chief Joseph, and the Dalles Dams, we are facing an acute power shortage by 1960 unless new starts are initiated immediately and added to in subsequent years.

Ice Harbor Dam

Ice Harbor Dam on the Snake River just above where it converges with the Columbia River near Pasco, Wash., appears to be the first dam which should be placed under construction at once to meet the overall power needs of the region. More than $1½ million has already been spent by the Corps of Army Engineers in design and planning for the dam at Ice Harbor. As a result of this work, construction can begin at once. This is probably the only dam on the main stream of the Columbia and Snake River on which sufficient engineering planning and studies have been made to make it possible to begin immediate construction. The studies of the Corps of Engineers show the cost ratio to benefits on Ice Harbor Dam justifies its immediate construction as an individual project.

Its strategic location closely adjacent to the Hanford atomic energy plant merits its immediate start and completion from the standpoint of our national security, according to the testimony of many agencies of the Government charged with the responsibility of national defense. Failure to bring about immediate construction means that power from other sections of the Northwest will have to be diverted to meet the rapidly growing needs of the atomic energy plant at Hanford. This in turn will make more acute the power supply for other areas in Oregon and Washington.

The great vast majority of the people of the Pacific Northwest are strongly in support of new starts each year on the Columbia and Snake River system, and particularly Ice Harbor Dam at this time. Our problem of an adequate supply of hydroelectric power to meet the fast growing needs of the region can only be met by new starts each year of great multipurpose dams on the Columbia and Snake Rivers, where there still exists locations for dams already approved by the Army engineers which will add millions of kilowatts to our immediate and future needs of industry, provide flood control and navigation so sorely needed in the area, and make possible new reclamation projects which in the few short years ahead will be needed to feed the rapidly growing population of America.

It has been charged that to make increased quantities of low-cost hydroelectric power available from our great resources on the Columbia and Snake Rivers would cause industries in other sections of the country to close up shop and move to the Pacific Northwest. There does not appear to be any basis of truth in such a statement, for to date not a single industry of this character presently located in the Pacific Northwest has closed up a factory in any other section of the country and moved to this area. On the contrary, the industries which have located here represent new factories so essential to our expanding economy, and have added materially to the economy of the Northwest and of the Nation as a whole.

The wisdom of the Congress in initiating this program and establishing a postage stamp rate of distribution through the Bonneville Power Administration has already brought about an amazing growth and development in many communities in the Northwest, and added greatly to our national economy. The progress made to date, both from the standpoint of national security and the creation of new wealth emphasizes the supreme importance of the Federal Government continuing to move ahead aggressively in adding new starts in multipurpose dams each year in order that we may ultimately obtain the maximum conservation and development of the water resources of the Columbia and Snake Rivers. Failure to develop this program to its maximum capacity will bring irrepairable losses to future generations and seriously affect the expanding economy of the region, and the Nation as a whole.

We also strongly urge continued appropriations for McNary, Chief Joseph, the Dalles, Lookout Point, and Detroit Dams. Their completion at the earliest date possible is of vital importance to the immediate future power needs of the region.

Surely, the last 20 years of development emphasizes most effectively the soundness of the thinking of the late great President, Theodore Roosevelt, and the late great Senator, Charles L. McNary, of Oregon, with respect to water resources development in the public interest.

In behalf of the people of the Pacific Northwest which I represent, I earnestly urge favorable consideration and immediate action upon your part to the end that we may have a new start in the form of Ice Harbor Dam on the Snake River at once, and that your committee likewise weigh carefully the importance

of a new start each year to the end that we may meet the evergrowing needs of the region and the Nation as a whole.

Senator KNOWLAND. Thank you very much, Mr. Baker.

Mr. BAKER. Thank you, gentlemen.

Senator KNOWLAND. The next witness is Mr. James Hill, Jr.

STATEMENT OF JAMES HILL, JR., DIRECTOR, INLAND EMPIRE WATERWAYS ASSOCIATION, GENERAL MANAGER, PENDLETON GRAIN GROWERS, INC., PENDLETON, OREG.

GENERAL STATEMENT

Mr. HILL. My name is James Hill, Jr., and I am here in three capacities, as director of the Inland Empire Waterways Association, general manager of the Pendleton Grain Growers, Inc., a large farmers' cooperative with about 1,100 members, and in addition to that I am a young man that has grown up in that country, I have lived there all my life, and I know it, and I have had the opportunity to see this river develop and see the many benefits that come from it.

Our company has been a pioneer in shipping wheat down that river, river transportation. We have seen what they can do, and we have seen our ranches since that power has come in, we have seen them expand their homes, they have nice homes, the power gives them those things, and they like to live in their homes. We have seen industry come into this community, we have seen barren land get water on it, and we have seen things that 20 years ago would have amazed many of us.

CONCERN ABOUT FUTURE DEVELOPMENT

So we are down to the situation where we get concerned about what this future development is going to be. When my father and my brother, who are wheat ranchers, come in voluntarily and ask me what is happening and when other farmers come along and say there has to be something done about it, what is the story, why, the people are getting interested in that thing, and we realize that our future out there is so highly dependent on conserving these great resources that we have, and what are they? They are water and soil.

When we conserve those things, then power and those things develop. In transportation I know it, I have been in on it and seen it, Senator, it is entirely conceivable that we will have seagoing barges that will go to Lewiston. They will carry 3,000 tons at a crack. The barges we are using right now we load about 1,000 tons. So that is the picture.

Now I have never done this at a hearing before, but as far as I am concerned, you are like bankers, and we have these resources out here, you are more sympathetic, I might say, particularly in the last 3 months. We are not in here for a grab. Those things are paying off. Those are self-liquidating projects. The vast proportion of that is being paid back, and it can and will be paid back because our industry and land will do it, but we have to have bankers. Somebody has to bank that thing, and it is a big deal.

Well, the Federal Government has been the banker, and I can just assure you as a businessman and as a person who has lived in that community that that is the way we look at it. We are not here trying

to get something that we are not convinced will pay out. I know those things will pay out as a business proposition.

RECENT POWER SHORTAGE

So in conclusion I would just like to say that our people out there that I represent, we are interested in continuing present dams just as rapidly as possible because this brownout that the Secretary just talked about last year, we had to shut our grain elevator down on the river because we used up more power in our allotted time. Bonneville told us to restrict, so we had to restrict our loading operations until we got in balance.

Senator KNOWLAND. How long a time?

Mr. HILL. We curtailed for about a week, and then slowed down our shipping schedule. That was just one of the actual cases. Businesses have that same ramification.

So we are interested in seeing that enough money be given to these present dams to get them done as quickly as possible because I think it would be false economy not to do that.

ICE HARBOR

The next thing is that we need some new starts in that comprehensive plan. Ice Harbor, I think, fits into that. Ice Harbor stands on its own feet; it will generate power; it will do a navigation benefit; a big navigation benefit. If you put in the barges, which cannot get to Lewiston now, you will be able to get in 6 to 8 months out of the year.

Senator CORDON. They can?

Mr. HILL. The boat companies tell me they can.

Senator CORDON. You mean you do not need the three dams above?

Mr. HILL. I would not say that. I say we operated on the river before we had Bonneville, but it was not any good.

Senator CORDON. And you did not operate the present type barges?

Senator JACKSON. What you are saying is that with the additional dams above Ice Harbor on the Snake, you will be able to get to Lewiston the year around and with Ice Harbor you will be able to utilize it 8 months out of the year?

Mr. HILL. That is right. With Ice Harbor, we can take our present barges and get to Lewiston 6 to 8 months of the year. With the other dams eventually 15 or 20 years down the road, these sea barges can never get to Lewiston until you have the series of dams.

Senator CORDON. Your four dams provide slack water from Bonneville to Lewiston?

Mr. HILL. That is correct. I have studied this thing, and if my opinion is worth anything as a practical operator and practical businessman, because that is what I am out there, my opinion is that 20 years from now we will look back, and we will find that transportation benefits will rank as great as power and reclamation.

NAVIGATION INCREASE

Senator CORDON. Do you know the extent to which navigation on the Columbia River has increased since the building of the Bonneville Dam and up to the filling of the pool at McNary Dam over even the

engineers' estimates of what it would increase? If you do not, we will get it from the Corps of Engineers.

Mr. HILL. I think you had better get it from the engineers. I am sure it is exceeded.

Senator CORDON. I am sure that it has been much greater than what the estimates were. The Corps of Engineers made a study of the river, and they took the then tonnage, and they estimated the additional tonnage for which there was then demand, which would result from building Bonneville Dam and the same figures with reference to McNary Dam.

The last time I had any information on it I was advised that the increase, actual increase, was far in excess of the estimated increase.

Mr. HILL. I am sure it is, sir; and in our own situation we put in a little bulk elevator in Umatilla, Oreg., in 1940, and we thought eventually we might move as much as 500,000 bushels a year. A year ago we shipped 6 million bushels down that river. Umatilla County is about the fourth largest wheat-producing county in this Nation, and the production is tremendous. Opening that river up to slack-water navigation is opening up one of the most important transportation systems this Nation will ever know. Our problem will be to produce enough stuff to keep that transportation system going.

So that is our story. I am amazed; I get discouraged in this thing, and I have been discouraged in the last couple of years because we have been here on Ice Harbor, and that is a good project, but I will tell you in the last 3 months in the Pacific Northwest, these rivers and these dams and this thing I am talking about is of vital interest, you can find the farmer, you can find the bootblack, you can find the businessman and you can find the banker, and they are beginning to know this story, and they are concerned about it, and not from the standpoint that we are in here to get Federal money as a grab, but we want to have a loan to carry this thing on because it will pay out. That is my story.

Senator KNOWLAND. Thank you.

Mr. HILL. Thank you, gentlemen.

(The statement referred to follows:)

PENDLETON GRAIN GROWERS, INC.,
Pendleton, Oreg., May 18, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee, Army Civil Functions,
United States Senate Building, Washington, D. C.

GENTLEMEN: My name is James Hill, Jr. I was born in eastern Oregon, and have lived and worked there all my life. In presenting information before your committee, my position is based upon the following three factors:

1. I am a director of Inland Empire Waterways Association, a voluntary association composed of individuals, businesses, and public bodies interested in development of the Columbia and Snake Rivers.

2. For 19 years, I have been secretary-manager of Pendleton Grain Growers, Inc., a farmers' marketing and purchasing organization with 1,100 farmer members in eastern Oregon. Our company has studied and taken part in river development in this area since 1934. We are the largest shippers of barge wheat on the Columbia River. Annually, we ship by barge from 4 to 6 million bushels from Umatilla, Oreg., on the upper Columbia, some 200 miles to Portland, Oreg., and Vancouver, Wash., on the lower Columbia. Petroleum products which we distribute to our farmers are shipped up the Columbia by barge to Umatilla, Oreg. (The policy of our association is expressed by the attached copy of a recent letter to President Eisenhower.)

3. As a native son and a business leader in eastern Oregon, I have watched, studied, and taken an active part in river development in the Pacific Northwest.

We have participated in the many hearings and studies which developed the revised 308 report on the comprehensive development of the Columbia and Snake Rivers.

We have seen and experienced the tremendous benefits which have already accrued from those major multiple-purpose dams already constructed. Power has developed our industry and improved our lands. Water has been made available to barren land. Transportation on the river has saved our eastern Oregon farmers and people money. The high and low levels of the rivers have been partially regulated. These things and these benefits have come about through multiple-purpose dams. These dams have been largely self-liquidating. Power and irrigation are returning the major cost of these developments to the Federal Treasury with interest.

Our farmers are vitally interested in continued full and maximum development of the Columbia and Snake Rivers. Conservation of our land and water resources dictates that we develop these great rivers to the maximum. More power is needed in our area. Slack-water navigation to Lewiston, Idaho, will provide one of the greatest economic resources possible in the future of our Pacific Northwest. New lands to be irrigated will provide homes for many, and food and fiber for our growing Nation. Floods will be controlled and property protected.

In conclusion, we strongly recommend, in behalf of all our people, that the comprehensive plan be carried out and that new starts be provided to keep up with the needs of our Pacific Northwest and the needs of our Nation.

Sincerely yours,

JAMES HILL, JR., *Secretary.*

PENDLETON GRAIN GROWERS, INC.,
Pendleton, Oreg., April 30, 1953.

President EISENHOWER,
White House, Washington, D. C.

DEAR PRESIDENT EISENHOWER: We have 14 directors who run our association, which is composed of 1,100 farmers in this eastern Oregon country. We meet at least monthly and discuss our business problems and the events which affect our business in this area.

At our meeting on April 28, we spent considerable time discussing what the future held in the way of further development of our Columbia and Snake Rivers.

For year we have watched, studied, and participated in development programs on these two great rivers. We have already seen the tremendous and effective results of multiple benefits from power, navigation, irrigation, and flood control develop from these dams already built.

Since this entire question of future development of the Columbia and Snake Rivers is now one of the important problems before your administration, we appreciate this opportunity to give you the unanimous viewpoint of our 14 directors at the conclusion of our discussion at our recent meeting.

1. We favor and endorse the overall comprehensive development of the Columbia and Snake Rivers by means of integrated multiple-purpose dams, which gives full consideration to maximum power, navigation, irrigation, and flood-control benefits.

2. We believe slack-water navigation to Lewiston, Idaho, can be one of the greatest future economic benefits to this Pacific Northwest.

3. A high-storage dam on the upper Snake River is a necessary part of the integrated comprehensive development of multiple benefits from authorized dams on the lower Snake.

4. We are for Ice Harbor Dam.

Such are the opinions and thoughts of our group, based on experience and being closely associated with these rivers over the years. Sincere best wishes to you and your staff.

Sincerely yours,

JAMES HILL, JR., *Secretary.*

ICE HARBOR DAM

STATEMENT OF HON. HENRY M. JACKSON, A UNITED STATES SENATOR FROM THE STATE OF WASHINGTON

GENERAL STATEMENT

Senator JACKSON. Mr. Chairman and members of the committee, I am appreciative of the opportunity given me through the courtesy of the chairman and the members in arranging the meeting this morning. I know I can speak for my colleague, Senator Magnuson, as well. I believe it has been stated that he is unavoidably detained on important Senate business.

USE OF POWER OUTPUT BY HANFORD AEC PROJECT

Without encumbering the record I would merely like to make an observation in connection with the Ice Harbor Dam that I think is an important consideration for the committee. Ice Harbor Dam is roughly about 12 miles from Hanford. The output of Ice Harbor Dam could be used very efficiently at the Hanford atomic-energy installation. You save the line loss, the distance being only 12 miles.

The second consideration is that it will provide a more reliable source of power for Hanford in the event of a disaster on the Columbia River, the Coulee Dam, or Chief Joseph, or any of the other dams. Ice Harbor will be unaffected because the Snake River comes in at Pasco right near Hanford as a tributary to the Columbia River.

The third consideration is that, of course, as the committee probably knows, the Atomic Energy Commission formally went on record, as I recall, with the building of the dam that it would be very helpful in connection with the problem at the Hanford atomic-energy work.

Senator CORDON. How far is that?

Senator JACKSON. It is upstream, Senator Cordon, I believe 30 or 40 miles. The problem has been the height of that dam in connection with a possible disaster at Priest Rapids which would inundate the Hanford area. As I understand it, there is a request now on the part of a number of the utility districts to build in there a lower dam than contemplated in the authorized 308 report.

The best solution to the power problem at Hanford, of course, is in the Snake project because it not only is closer—well, they are both relatively close, I do not think that is too much of a difference—but it provides an independent source of power in the event that Priest Rapids should be built and destroyed in a war. The facilities at the Ice Harbor project would be intact because it is not on the Columbia, it is on the Snake.

I think that is the principal point of advantage.

Senator CORDON. How far is it from Ice Harbor?

Senator JACKSON. Mr. Miller tells me that it is 20 miles.

Senator CORDON. Is it about the same distance then up to Deschutes?

Mr. MILLER. A 50-mile pool, Senator. Ice Harbor is about 10 miles from the mouth of the Snake River there and the confluence to the Columbia and each one of the four dams is approximately a 50-mile pool. It is about 140 miles from there to Lewiston, Idaho.

Senator JACKSON. At the present time we are supplying Hanford from Grand Coulee with also a tie-in coming from McNary as soon as the generator is on the line.

Senator KNOWLAND. Thank you, Senator.

Senator JACKSON. Thank you, gentlemen.

Senator KNOWLAND. The next witness is Lester F. King.

OREGON WHEAT GROWERS LEAGUE, UMATILLA COUNTY, OREG.

STATEMENT OF LESTER F. KING, PRESIDENT

GENERAL STATEMENT

Mr. KING. Mr. Chairman and Senators, my name is Lester F. King, and I am a wheat farmer from Umatilla County, Oreg., and I was born and reared there. At the present time I am President of the Oregon Wheat Growers League. This league is a voluntary association of wheat producers organized in 1927.

Now for the past 25 years we have represented the interests of wheat farmers in our State. Throughout the history of our organization we have supported self-financing programs. Six years ago we asked the State legislature to establish the Oregon Wheat Commission, financed by a tax of ½ cent per bushel levied against the grower. The fund created by this tax is being used to finance a program of research, education, and publicity to help find new markets for our wheat and to preserve and expand existing outlets.

I mention these facts to show you that I represent a group of bona fide wheat producers, operating our own farms and prepared to share the expense of solving our own problems.

NEED FOR ECONOMICAL TRANSPORTATION

Wheat is our principal crop. On my own farm, we have tried a number of other crops but we always come back to wheat because that is what we can grow most efficiently. We live back in the interior, away from the coast ports. For this reason, economical transportation is vital to our very existence. That is one reason why the development of the Columbia River and its tributaries is so necessary. Barge transportation of wheat down the river and petroleum and other products up the river is necessary if we are to meet rising costs of farming operations and still stay in business.

We are also interested in the river development for its irrigation purposes. We are also interested in it through the power that it can furnish, the power for the industries that need it now, and for the expanding industries that will no doubt move into the territory as times will demand.

POWER SHORTAGES

Now right now we are short at times of power as these other gentlemen have mentioned, and we think we have to have more power even with our existing industries there. Money spent by the Federal Government for development of the Columbia River we also consider as an investment and not an expense.

Money invested for this purpose is returned to the Nation manyfold. A large percentage of these expenditures is paid back directly

to the Federal Treasury with interest by the users of power and irrigation. In addition, the whole Nation benefits in the form of income taxes, newly created wealth, employment and homes for our growing population, and by protecting property from flood destruction. More important yet, river development is essential to our national defense.

If I were in your places, I wouldn't consider the cost of building these dams as an expense, because it is really a loan from the Federal Government which will be repaid many times over.

ENDORSEMENT OF PROJECT BY LEAGUE

Now in 1950, and I will not go ahead to read the entire resolution passed, but our wheat growers' league in 1950 endorsed the development of this river and asked for speedy development of the projects that are already existing and also the additional ones. In 1951 we studied this report, 308, of the United States Army engineers and endorsed this report as submitted.

Now, as you can see, I am not an authority on how to build a dam. But I am a wheat farmer representing a lot of other wheat farmers, and I know that we need to have the Columbia River system developed as soon as possible. I have lived in this area all my life, and I have seen what these multiple-purpose dams do. We are short of power in the Pacific Northwest, but we need a lot of other things, too. It makes sense to us in the region to build the kind of dams that will generate the largest amount of power and still provide for navigation, irrigation, and flood control.

Gentlemen, these rivers are big and the water flows fast. We need big dams to harness all that power and do all the other jobs that need to be done. The kind of dams we need are not the kind of dams that are built by private power companies. We can do a lot of things for ourselves, and we are doing all we can, but navigation, flood control, reclamation, and power are too big for us to handle without the help of the United States Government.

We do not advocate the Government going into the retail-power business, but we think they should produce it and wholesale it to those that are in the distribution business.

We urge very strongly that the Federal construction work already started be completed and that the new starts be made as soon as possible. Our people back home are very much concerned as to what is to happen to our river development.

I appreciate this opportunity of being before you, gentlemen. If you have any questions, I would be happy to try to answer them.

Senator YOUNG. Mr. Chairman?

Senator KNOWLAND. Senator Young.

Senator YOUNG. Senator Cordon tells me Mr. King is a good wheat farmer. May I have a couple of minutes on that subject?

Senator KNOWLAND. Yes, indeed.

VOTING ON WHEAT QUOTAS

Senator YOUNG. Do you recall what percentage of the Oregon wheat producers voted for wheat quotas?

Mr. KING. Senator, it was too close for comfort.

Senator YOUNG. What percent would it be? Do you care to make a guess?

Mr. KING. I would hesitate to guess since it is my understanding that a farmer producing 15 acres of wheat can vote. It might not be to his interest——

Senator YOUNG. I ask that because we are faced with some important decisions here. Some sections have voted 95 in favor by percent, but Ohio voted them down. Ohio has more votes on wheat quotas than Kansas.

Mr. HILL. Our Oregon wheat growers went for it, but I am satisfied that the actual Oregon growers voted a high percentage for quotas.

Senator YOUNG. Do you think you would have that same high percentage?

Mr. HILL. I would say that the wheat producers you can figure 90 percent will vote for quotas.

Senator YOUNG. Thank you, Mr. Chairman. I could not pass up this opportunity.

Senator KNOWLAND. The Chair is always glad to cooperate with Senator Young.

Mr. KING. I would like to have my statement incorporated in the record.

Senator KOOWLAND. That will be done.

(The statement referred to follows:)

STATEMENT BY LESTER F. KING

My name is Lester F. King. I am operating a wheat farm in Umatilla County, Oreg., in the community where I was born.

This year I am president of the Oregon Wheat Growers League, a voluntary association of wheat producers organized in 1927. For the past 25 years we have represented the interests of wheat farmers in our State. Throughout the history of our organization we have supported self-financing programs. Six years ago we asked the State Legislature to establish the Oregon Wheat Commission, financed by a tax of ½ cent per bushel levied against the grower. The fund created by this tax is being used to finance a program of research, education, and publicity to help find new markets for our wheat and to preserve and expand existing outlets.

I mention these facts to show you that I represent a group of bona fide wheat producers, operating our own farms and prepared to share the expense of solving our own problems.

Wheat is our principal crop. On my own farm, we have tried a number of other crops but we always come back to wheat because that is what we can grow most efficiently. We live back in the interior, away from the coast ports. For this reason, economical transportation is vital to our very existence. That is one reason why the development of the Columbia River and its tributaries is so necessary. Barge transportation of wheat down the river and petroleum and other products up the river is necessary if we are to meet rising costs of farming operations and still stay in business.

A second reason why wheat producers need river development is that irrigation will bring about diversified agriculture.

A third interest in river development is the need for power to enable industries to grow. We are exploring possible industrial uses for our wheat but new industries require power, as you all know, and at times now we are short of power and have to curtail production at our existing plants.

Money spent by the Federal Government for development of the Columbia River is not an expense but an investment. Money invested for this purpose is returned to the Nation many fold. A large percentage of these expenditures is paid back directly to the Federal Treasury with interest by the users of power and irrigation. In addition, the whole Nation benefits in the form of income taxes, newly created wealth, employment and homes for our growing population, and by protecting property from flood destruction. More important yet, river development is essential to our national defense.

If I were in your places, I wouldn't consider the cost of building these dams as an expense because it is really a loan from the Federal Government which will be repaid many times over.

In 1950, the Oregon Wheat Growers League adopted the following resolution, which reaffirmed our consistent position over a period of years:

"We are desperately short of electrical power, both for development of our area and for national defense. Navigation on this river is of great importance to our area. Speedier development of one of our greatest natural resources is essential; at the present rate it will be 8 years before there will be enough power to meet even present demands. We therefore recommend the Oregon Wheat Growers League use all of its influence to speed up the development of the Columbia River and its tributaries."

In 1951 our membership unanimously endorsed the comprehensive development of the Columbia and Snake Rivers in accordance with the revised report number 308 of the United States Army engineers. I am sure this report is familiar to all of you.

Now, as you can see, I am not an authority on how to build a dam. But I am a wheat farmer representing a lot of other wheat farmers and I know that we need to have the Columbia River system developed as soon as possible. I have lived in this area all my life and I have seen what these multiple purpose dams do. We are short of power in the Pacific Northwest but we need a lot of other things, too. It makes sense to us in the region to build the kind of dams that will generate the largest amount of power and still provide for navigation, irrigation, and flood control.

Gentlemen, these rivers are big and the water flows fast. We need big dams to harness all that power and do all the other jobs that need to be done. The kind of dams we need are not the kind of dams that are built by private power companies. We can do a lot of things for ourselves and we are doing all we can, but navigation, flood control, reclamation and power are too big for us to handle without the help of the United States Government. I don't want the Government in the retail power distribution business, but to wholesale to ones who are in this business.

We urge very strongly that Federal construction work already started be completed as soon as possible and that construction on new dams be commenced immediately. The people back home are very much concerned as to what is going to happen to our river development.

I appreciate the opportunity of making this brief statement and shall try to answer any questions you may have.

Senator KNOWLAND. Our next witness is Mr. Roland E. Miller, assistant publisher and editor of the Walla Walla Union-Bulletin. We had the farmers and now I am glad to see a member of the fourth estate testify.

ICE HARBOR DAM

STATEMENT OF ROLAND E. MILLER, ASSISTANT PUBLISHER AND EDITOR OF THE WALLA WALLA UNION-BULLETIN, WALLA WALLA, WASH.

GENERAL STATEMENT

Mr. MILLER. Mr. Chairman and members of the committee, I am Roland E. Miller, assistant publisher and editor of the Walla Walla Union-Bulletin. I am also appearing on behalf of the Walla Walla Chamber of Commerce, of which I am immediate past president.

If I may, I would like to summarize for the committee a formal printed statement which I have presented.

The district in which I live is in the unique position of being in one of the most critical power shortages in the conntry, although it is surrounded by the finest low-cost power sites to be found anywhere. Our problem is caused by two things: First, a very pronounced natural drought during the past decade, accompanied by the installation at

Hanford of the atomic-energy plant; and, second, the dams on the lower Snake River which were requested to meet the requirements of this district, but they have not been started even though authorized 5 years ago.

Ice Harbor Dam, on which a considerable amount of money has been spent, is ready to go at a moment's notice when construction funds are made available. Failure to provide that facility would, in my opinion and in the opinion of the district I represent, endanger our position. Without exception, I think both Government and private engineers who have examined the project feel that it is the logical next step in the series of dams being built in the region.

I believe that private and public utility representatives have already testified as to the urgency of additional starts to meet our power needs.

GROWTH OF ELECTRIC-POWER USE

With reference to the point Senator Jackson made a few minutes ago, southeastern Washington's use of electric power has grown from 18,000 kilowatts in 1940 to 230,000 kilowatts in 1950. The estimated loads for 1955 are 500,000 kilowatts and, in 1960, 600,000 kilowatts. That is in the area immediately surrounding the Hanford plant.

Senator JACKSON. Six hundred and fifty thousand compared to what?

Mr. MILLER. Eighteen thousand kilowatts in 194.

Senator JACKSON. In other words, the most fantastic increase in the world?

Mr. MILLER. Yes. Much of this increase, of course, has been due to the expansion of the Hanford plant, which has no power of its own, but is required to depend on the power resources of the area. I think the Atomic Energy Commission began to stress the urgency for this work, but, thus far, Congress has not provided the power needs for this particular atomic-energy installation.

The only real question, as I see it, is whether or not the Federal Government should continue to assist in the program in the immediate future in the face of its serious budgetary problems. I have suggested two points that might be followed: First, that, although individual utilities should do their part, and are doing so, the principal sites are on the main stem of the Columbia and Snake Rivers, which means that the Federal Government is the only one that can do the job until such time as the regional or interstate agency, or this partnership that the President was talking about, could get under way.

REPAYMENT SCHEDULE

These specific Northwest projects are far ahead of the repayment schedule on the Government investment in the projects. Since 80 percent or more of the total investment is repayable out of power revenues with interest, it would seem sensible to me to have bonds or some device of that type which would reduce the budget requirements. But until some alternative method of financing and possible overall responsibility could be worked out by Congress, it is my opinion, and I think that of most of the people in my area, that it is neither fair to the region nor to the good of the national economy to suddenly call a halt to work of this type.

No machinery exists by which the region can take up the slack.

My statement makes two other points, one of which is to emphasize that Ice Harbor does not represent exclusively a power benefit since it has transportation and irrigation benefits. It happens that power revenues will repay most of the expense.

ATOMIC ELECTRIC POWER

The other point I want to make to you is to indicate my belief in a recent suggestion that was made before the House committee that atomic-energy plants would soon make powerplants outmoded. In my opinion that is absurd. I am not an atomic energy expert nor an electrical engineer, but I think any competent electrical engineer could discuss it with you and riddle the argument in a hurry.

Senator JACKSON. I think it ought to be said that in all of the public announcements the Atomic Energy Commission has been quite restrained in saying that it would be 10 years, and I think the President of General Electric stated it would be a minimum of 10 years. No responsible individual that is familiar with the program has ever indicated that atomic electric power would be a substitute for hydroelectric power, which is falling water. There is not anything cheaper than falling water which goes out to sea and comes back again.

Mr. MILLER. If I may pursue that a little more, an electrical engineer explained it to me that after all what you get from an atomic pile is heat, the same as you get from coal or oil, and that is the use it has in making electricity. You take this heat and put it through a heat exchanger and put it through a steam turbine. This engineer told me that even if this heat cost, whether from oil or atomic energy, even if the heat cost were cut to nothing, it would still be more costly to operate a steam plant than it would be to have a hydro plant.

Senator CORDON. That interests me because we just got information with regard to the Tennessee Valley where they said the cost was 3½ mills.

Mr. MILLER. I am not in the business, but that is what an engineer told me. He said that even if the actual cost of the heat were nothing, it still would be more costly to operate the steam plant than a hydro plant.

Senator KNOWLAND. I suppose like any other situation you cannot generalize on it too much. You happen to have a cheap and readily available source of hydroelectric here. You might get a situation where if you had your steam plant practically over a coal field or an oil supply or something else that you would get a fluctuation that would throw it out of balance, but I am inclined to agree with Senator Jackson.

I serve on the Joint Atomic Energy Committee, and there will be development, but precisely when it will come and at what cost is perhaps a little premature. But I can see in certain areas where they do not have the water that you have in the Northwest where they might be able to use atomic energy cheaper than fuel.

ECONOMY OF HYDROPOWER

Mr. MILLER. That is the point that I wanted to make—that the hydroplants are less expensive.

Senator JACKSON. Mr. Chairman, there is the additional fact that when you attempt to compare atomic power with hydropower, namely, that you are burning up a resource when you use coal for steam or when you use fissionable material. In the case of hydropower, you are just utilizing the supply of energy that is available from nature.

Mr. MILLER. I made that point a little more fully in my statement.

My personal belief is that, given the proper machinery, it is quite possible that the people of the Pacific Northwest, either by themselves or in partnership of some sort with the Federal Government, could handle this water-resource problem entirely, but it will certainly take a considerable amount of discussion and conference between the region and the Congress before they can arrive at a solution to the problem.

GROWTH OF POWER NEEDS

In the meantime, our power needs are growing so rapidly that it is extremely vital that the Government's participation not be withdrawn or slowed up because of the dangerous results which might come about to our economy.

Senator KNOWLAND. Thank you very much.

Mr. MILLER. Thank you, gentlemen.

(The statement referred to follows:)

STATEMENT OF ROLAND E. MILLER, ASSISTANT PUBLISHER AND EDITOR OF THE WALLA WALLA UNION-BULLETIN

My name is Roland E. Miller. I am assistant publisher and editor of the Walla Walla Union-Bulletin, daily newspaper of Walla Walla, Wash. I am also authorized to appear as representative of the Walla Walla Chamber of Commerce, of which I am immediate past president, having served as president during the year 1952. The Walla Walla Chamber of Commerce is composed of 1,200 business, agricultural, professional, and labor leaders of the city of Walla Walla.

I am here today to present my views and those of the people I represent on behalf of appropriations for Ice Harbor Dam and the dams now under construction in the Columbia River Basin. I would also like to discuss briefly with you several related questions on river development which are within the scope of work of this committee.

My community has long been interested in comprehensive development of the Columbia River's water resource. It has been a leader in the movement for maximum utilization of this resource for irrigation, navigation, and power. Its strategic geographical location was recognized when it was chosen as the head office for a district office of the United States Army Corps of Engineers. We can speak, I think, for the interest of all of the communities and areas of Washington and Oregon east of the Cascade Mountains.

The particular district in which I live is one of the most rapidly growing in the entire United States, its population having expanded in the last 10 or 12 years even more markedly than the Pacific Northwest as a whole. It is also unfortunately, one of the most power-deficient areas of the entire country. This is despite the circumstance of nature that it is surrounded by some of the finest hydroelectric power sites to be found anywhere. The demands of agriculture, industry, and homes for electric energy have outstripped the ability of the power utilities to supply its needs. On top of this normal growth of power demands, the location of the huge Hanford atomic energy installation in my district has further accentuated a problem which has lately become our primary concern. Southeastern Washington's use of electric power has grown from 18,000 kilowatts in 1940 to 89,000 kilowatts in 1945, and 230,000 kilowatts in 1950, and estimated loads of 500,000 kilowatts in 1955 and 650,000 kilowatts in 1960 are now forecast. Much of this increase in demand for power, of course, has been due to the expansion of the Hanford plant, which has been furnished with no power supply of its own but instead has been forced to depend on the already strained resources of the area. The Atomic Energy Commission as long ago as 1950 began to stress the urgency of a reliable power supply and requested a nearby power source which

could be isolated from the rest of the system, but to date Congress has not provided for the power needs of this particular atomic energy installation in the manner that it has for nearly all similar projects.

The natural place to obtain electric energy for the Hanford plant, as well as for all of southeastern Washington and northeastern Oregon, is the lower Snake River. The four dams which have been authorized by Congress on the lower Snake, of which Ice Harbor is the first, would have installed generating capacity of nearly 1 million kilowatts. All of the plans which have ever been developed for serving the power needs of the area have inevitably been tied around the Snake River projects. They are not only properly located in the heart of the district, thus requiring a minimum of transmission-line construction to the consuming markets, but they can be built with virtually no destruction of farmlands or dislocation of communities. I do not pretend to be an electrical engineer, but I have seen the results of board studies made by the Bonneville Power Administration for our area and they show the obvious and economical source of power is first, Ice Harbor Dam, and later the other three upstream dams. To all of us who live in the district, this makes commonsense, for the hydropower is there waiting to be harnessed, at present wasting its way unused to the Pacific Ocean.

I am impressed also with the fact that during the years I have been studying and writing about this question, I have yet to meet a utility expert, an engineer or anyone else qualified to discuss the subject who does not believe that Ice Harbor Dam should logically be built as soon as possible. The Corps of Engineers, the agency which plans and builds these projects, has recommended that it be built for 4 successive years. The Bonneville Power Administration, which has responsibility for marketing the power from Federal projects in the Northwest, and which has necessarily had to do much of the planning for meeting the region's power requirements, has had Ice Harbor Dam at the top of its list for at least 4 years. The engineers of the Atomic Energy Commission, after examining the problem with great thoroughness, have agreed that the best source by far to meet their specific needs—thereby relieving the strain on the district's overall power supply—is Ice Harbor Dam, only 25 or 30 miles away from the atomic-energy plants. And only as recently as March 23, 1953, Interior Secretary Douglas McKay, after a review of the river-development program, stated in a letter to Representative Hal Holmes that "Power from Ice Harbor could assure the Atomic Energy Commission of an independent source of power for the Hanford Works so that the installation can be segregated from the remainder of the Northwest power system." In view of the great importance of the Hanford Works to national defense, and the critical power deficiencies in the Pacific Northwest, it has seemed surprising to the people of my district that there should have been any hesitancy about starting work at once on the one project which is already fully planned and ready to go at a moment's notice.

What has been happening in my particular district, I am sure you are aware, is not unique within the Pacific Northwest. Demands for electric energy have been growing swiftly ever since 1940, with requirements having increased an average of 14 percent annually compared with the national rate of gain of 9 percent. Energy used in the region jumped from 7 billion kilowatt-hours in 1940 to 30 billion in 1951, and requirements for the current year of 1953 are estimated at 39 billion. For the future the forecast is 69 billion kilowatt-hours in 1958 and 93 billion in 1962. In other terms, the need for new power generation is advancing by approximately the capacity of a Bonneville Dam every year and will probably grow even more rapidly in the years ahead.

Because of the need to plan facilities well in advance, every year since 1946 has seen the adoption of a generation schedule which represents the best informed thinking of the operating utilities in the Northwest. Not a single schedule has been maintained, however, and the region is now far behind the plans set up 6 years ago—with results which have been tragically evident in lost industrial opportunities, unemployment, and great economic waste. At the present rate of demand growth, normal expansion of loads in the region will eat up the new supplies to be provided at McNary, Chief Joseph, and the Dalles Dams almost as fast as they become available, so that unless additional new starts are provided from year to year we stand little or no chance of emerging from our power shortage in the foreseeable future.

The question which I am certain you must now be asking is this: Granting the facts thus presented, what should be the role of the Federal Government in supplying the power needs of the district and region? This is a complex problem, and one which I would not attempt to discuss in detail today, but I would like to suggest several avenues by which we might approach an answer.

In the first place, I think it must be recognized that the principal potential for electric energy in the Pacific Northwest is on the so-called "main stem" of the Columbia River and its principal tributaries, notably the Snake—which itself possesses some 11 million out of the 33 million kilowatts of power which can be developed in the river basin. Most of the other sites are small, expensive, and susceptible to development only as part of an overall program in which the costs can be spread. Private and publicly owned non-Federal utilities of the region have, moreover, been consistently hamstrung in their attempts to build dams in the best available remaining locations. The history of the Cowlitz and Deschutes River projects, for example, is a frustrating story of roadblocks thrown by those who feel keenly about the possible damage to migratory fish runs. Nor is there any hope that these roadblocks will be removed in the near future.

The fact is that the only way to solve our problem is through an accelerated schedule of construction of the multiplepurpose dams on the main stem of the river system. Does this mean that the Federal Government must build them? Not necessarily, looking at the long-range point of view. They could be built by a State or regional agency operating under an interstate compact, or by a regional nonprofit corporation, or by a combination of utilities of the area. But I am sure you are thoroughly aware of the fact that at the present time there exists no mechanism by which this could be done. There has been a good deal of discussion of the possibility of an interstate compact, or a Federal-State partnership in this business of developing water resources, but to date it is nothing more than discussion. Until the very many knotty problems standing in the way of transferring responsibility from Federal to regional hands are solved, it would appear that the Federal Government is our only hope. Certainly it is my viewpoint, and that of the people of the district in which I live, that Congress cannot with justice suddenly repudiate the Federal Government's existing commitments in the Pacific Northwest, and leave us in a vacuum until a new policy and new approach have been developed. Sympathetic as I am to the view that the time has come for reexamining the entire Federal program in this field of water and power, I cannot subscribe to the theory that the way to do it is to come to a halt for several years while the complex problems are being analyzed and a possible new system is being worked out. Our Pacific Northwest economy is tightly bound up with the development of new power projects on the rivers and the repercussions in the region will be enormous if the only answer is to be drastic immediate budget cuts with merely a promise of some change a few years hence.

Secondly, I would like to suggest to the committee that it is highly unrealistic to consider appropriations for revenue-producing dams as current expense items, and to tie the rate of investment in such projects to the ups and downs of the Federal budget. In my business, which is the newspaper business, or in any other business with which I am familiar, no one could intermix currrent expenditures with capital investment and long survive. Because of the impracticality of such a system, I have been urging for at least 5 years that Congress revise drastically its approach to the problem of providing construction funds for these projects. It could, of course, adopt the system used in Sweden of separating current expenditures from capital investments and carrying the latter in a special capital budget, handling them in entirely different fashion and making them stand on their own as a business operation. Such a double budget obviously has merit from the standpoint of giving a far clearer accounting picture of the Government's finances; for a business of this size, it would seem that the most accurate possible picture would be desirable.

But there are other ways of handling the problem than merely a revision of the accounting principles. One method of relieving the Federal budget almost completely of capital-fund requirements would be the issuance of revenue bonds for the reimbursible power costs—which in the case of our Columbia River projects amount to approximately 80 percent of all expenditures. Thus by the revenue-bond device the appropriation requirements would be cut to 20 percent of their present size, a tremendous help in these days. Another parallel method would be to authorize the Treasury Department to make construction advances, issuing Treasury bonds to provide the funds for the power portion of the costs, and collecting repayment moneys with interest over an agreed-upon period to retire the loan. And there are numerous variations, all of which would accomplish the same purpose.

I recognize, of course, that it is not the function of this committee to consider such alternative financing proposals, nor would it be likely that agreement could be obtained upon any of the suggested methods quickly enough to solve our

immediate problems. But I have discussed them briefly because they illustrate the essential business soundness of the projects in question. The record of Federal dams in the Pacific Northwest indicates clearly that the role of the Federal Government is essentially that of a banker, lending funds for construction purposes which are very largely repaid with interest. The latest figures I have seen show that the repayment of the power portions of existing projects—which represent by far the greatest proportion of the total Federal investment in the projects—is far ahead of schedule. The Bonneville Power Administration's substation and transmission-line investment is already 26.4 percent repaid; Bonneville Dam is 31.2 percent repaid; and Grand Coulee Dam is likewise well ahead of the repayment schedule. There is certainly no reason to believe that the future will bring any great change, for McNary Dam will represent an investment that is approximately 90 percent reimbursable while the other authorized projects will be 80 to 85 percent repayable, all with interest. These are high-grade investments, out of which the Government not only gets all of its money back directly in repayment but collects vast additional dividends from the taxable wealth produced as a result.

I have been talking principally about power, simply because that is the most urgent problem—and also because of the happy coincidence that power is going to repay most of the cost of Ice Harbor Dam and other projects in the system. But I would like to emphasize to the committee that I am interested basically in the overall maximum utilization of the water resource. That means not only power but irrigation, navigation, recreation, and the like. Ice Harbor Dam is far from being just a power dam. From the standpoint of navigation, it eliminates the worst rapids in the Snake River between its mouth and Lewiston, making commercial barge navigation feasible for 6 to 7 months a year. From the standpoint of irrigation, it has an ultimate pumping potential of several hundred thousand acres, much of it in Walla Walla County—which is another reason why I am interested. Full development of the entire irrigable acreage is not likely to be realized soon, but it is estimated that more than 100,000 acres will be developed in a relatively short time after completion of the dam.

One other point I would like to discuss briefly before concluding this formal statement. A representative of the Columbia River Salmon and Tuna Packers Association told the House Appropriations Subcommittee recently that it was foolish to build hydroelectric dams when atomic energy would probably make them obsolete in the near future, possibly "even before completion." This argument can be classified, not only figuratively but actually, as a red herring, with no possible justification in fact. One does not have to be an atomic scientist to understand the basic economics of atomic power, which is merely the substitution of nuclear fission for coal, oil, or gas as the source of heat for a steam-generating plant. An electrical engineer in whom I have a good deal of confidence analyzed the question this way in talking to me one day: "Assume, for the sake of argument—although it would be impossible—that the release of atomic energy were to become so efficient as to cost nothing. The fuel cost for the atom-fired steam-generating plant would then be zero. But even under those circumstances, the cost of electric power produced at the plant could not be brought down as low as the cost of generating hydroelectric power at one of the big projects like Grand Coulee or Bonneville Dams, for a steam plant is simply more costly to operate regardless of the type of fuel."

What this means, of course, is that no matter how rapidly our atomic scientists solve the tricky problems of devising a workable heat exchanger for their atomic piles, it is absurd to quit building dams and wait for an atomic powerplant to get into operation. Such an atomic powerplant in the Pacific Northwest would sit idle because the cost of its electricity would be too high to compete with electricity produced in a turbine generator. And this is without reference to the fact that our falling water is an inexhaustible resource, renewed year by year, whereas uranium, like oil or coal or natural gas, is far from inexhaustible.

Let me reemphasize that I am urging immediate construction of Ice Harbor Dam, and continued appropriations for other projects in the region, because of my fundamental belief in the principle of conservation—a principle which can be endorsed by nearly everyone, irrespective of creed or politics. We in the Pacific Northwest have a tremendous natural resource in our rivers, but that resource can be frittered away and wasted unless proper conservation is practiced.

The 33-million-kilowatt potential of the river system can be reduced by half or more, the millions of acres of potentially irrigable land can likewise be tossed into the discard, unless a soundly conceived engineering plan for development of the resource is followed. We have the basic elements of such an engi-

neering plan in the revised 308 report on the Columbia River, which has been endorsed wholeheartedly by the region. The projects need not necessarily be built by the Federal Government, but they need to be built according to the plan, so that maximum benefit may be gained from the resource.

Conservation demands that Ice Harbor, and eventually the other lower Snake River projects, be built to supply the power needs of the district in which it is located. In the face of the power-supply problems encountered in the past several years, and the even more critical drain to be placed by the expansion program at Hanford which was approved by Congress last year, it would be wasteful to attempt to find the generation elsewhere. It would be even more wasteful, as well as dangerous, to ignore the problem completely and let the region stew in its own juice until some other answer can be produced.

Senator KNOWLAND. Mr. John W. Shepard, general manager of Lewiston Grain Growers, Inc., Lewiston, Idaho, and director of the Inland Empire Waterways Association.

COLUMBIA RIVER BASIN DEVELOPMENT

STATEMENT OF JOHN W. SHEPARD, GENERAL MANAGER OF LEWISTON GRAIN GROWERS, INC., LEWISTON, IDAHO, AND DIRECTOR OF INLAND EMPIRE WATERWAYS ASSOCIATION

GENERAL STATEMENT

Mr. SHEPARD. Mr. Chairman and members of the committee, my name is John W. Shepard, general manager of the Lewiston Grain Growers, Inc., comprising 5 counties in Idaho and 1 county in Washington. We have over 2,000 farmer members. We have a potential tonnage in our trading area of 300,000 tons of farm commodities and our farmers are very much interested in the overall comprehensive development of the Columbia River Basin with full utilization of the great water resources.

In our situation, gentlemen, we have, I think, a very paramount situation. We are coming back into an area where we have to go in competition with other wheat-exporting countries. I think you are all aware of the fact that Canada has a special export rate on grain. Mr. Archie Camp just returned recently from the Near East, and he said that a lot of our grain could have been placed there had it not been for the fact that we were taken out of competition due to extremely high freight rates from origin to tidewater.

I think the Government has assumed a certain amount of responsibility in disposing of our surplus commodities in the Pacific Northwest because we are a surplus area. This would go a long ways toward assisting us in competing with our foreign markets.

ICE HARBOR PROJECT

With respect to Ice Harbor, if we could get Ice Harbor started, it would give us 6 to 8 months of navigation.

Senator CORDON. Would that be with the large barges?

Mr. SHEPARD. I would not say oceangoing barges.

Senator CORDON. With the larger ones?

Mr. SHEPARD. Yes, sir.

Ice Harbor would drown out a great many of our rapids that make it almost impossible to go up them. Ice Harbor Dam, as Senator Jackson said, would take care of Hanford. I would like to refer to

one remark made at Walla Walla at a meeting of the Columbia Basin Interagency Committee. A man from the Atomic Energy Commission said, referring to a mistake that was made at Grand Coulee Dam when a hole was left open and water came on one of the turbines, as you know, and it took several days to fix that up, and this man from Hanfor said if they had been 30 minutes later getting that fixed all of Hanford would have been stopped.

That is how important it is that we have a dam and hydroelectric power so that it can be used to take care of Hanford.

As I said, Ice Harbor would open the Snake River to Lewiston for 6 to 8 months of the year, and Ice Harbor Dam planning has already been done. We in our area would like very much if consideration could be given not only to continue the starts that have already been made but would consider Ice Harbor Dam as a new start to relieve us not only of power, navigation, irrigation, but it would help us greatly in our shipment of grain.

This year we have had no serious handicap from car shortage. Two years ago we had a terrific time.

We will be very happy if you will give us that consideration, gentlemen.

Senator KNOWLAND. Thank you very much.

Mr. SHEPARD. Thank you, gentlemen.

(The statement referred to follows:)

STATEMENT OF JOHN W. SHEPARD, GENERAL MANAGER OF LEWISTON GRAIN GROWERS, INC., LEWISTON, IDAHO, AND DIRECTOR OF INLAND EMPIRE WATERWAYS ASSOCIATION

COLUMBIA RIVER BASIN DEVELOPMENT

My name is John W. Shepard of Lewiston, Idaho, general manager of Lewiston Grain Growers, Inc. My company serves over 2,000 grain farmers patrons in the 5 north central Idaho Counties and Asotin County, Wash. We stored and merchandised over 5 million bushels of grain and peas during the past fiscal year.

The 6 counties above referred to are situated in the most productive section of the great inland empire, and have a combined cultivation of 896,300 acres. The Department of Agriculture has designated the Pacific Northwest as a grain surplus area, and, as a matter of fact, Oregon, Washington, and Idaho produce twice as much wheat as the three States can consume.

The farmer's transportation costs are a very important factor in the movement of his surplus grain, which normally amounts to 40 million bushels of wheat annually in the Pacific Northwest. Land transportation rates in Oregon, Washington, and Idaho are partly responsible for the accumulation of surplus stocks of grain, due to the inequality of our Northwest grain rates, as compared with the grain-producing Provinces of western Canada.

The freight rates my farmer members are obliged to pay to transport their grain to Portland or Seattle range from 26.31 cents to 28.73 cents per bushel, a distance of not over 400 miles. This exorbitant transportation cost to tidewater strikes at the very roots of the fundamental cause of our trade stagnation, as it often eliminates us from the competition of foreign markets.

Inland river navigation could aid in the solution of this unfortunate situation, and, it is with this thought in mind, that I ask the support of you and your committee for the construction of Ice Harbor lock and dam 9 miles above the mouth of the Snake River in the State of Washington.

All of the studies made by the Corps of Army Engineers have emphasized the need for Snake River navigation as being in the best economic interest of the overall development of the Columbia and Snake Rivers.

The latest surveys have shown that 75 percent of the potential river tonnage of the Columbia River Basin would originate on the Snake River.

As a director of the Inland Empire Waterways Asosciation, I have been an ardent supporter of a program which calls for the overall conservation of the water resources of the Columbia River System.

I am also chairman of the waterways committee of the Lewiston Chamber of Commerce, and this civic body has sponsored river development for over 30 years.

The proposed lock and dam at Ice Harbor Dam site would be a multipurpose dam, and would serve many needs of the Pacific Northwest.

This dam would be a self-liquidating project through the sale of hydroelectric power alone, and it is of common knowledge that the shortage of electricity in the Pacific Northwest is quite acute.

The Army engineers recognize the Snake River as the most important stream in the United States from a power standpoint, and power can be generated as a byproduct of navigation betterments on the Snake River at a unit cost substantially cheaper than any other prospective hydroelectric developments.

This proposed dam, if constructed, would insure ample power for the Hanford atomic-energy plant at Richland, Wash., and would provide an opportunity for extensive irrigation benefits. It would lower transportation costs to our producers, as well as provide upstream rates which would benefit the entire consuming public of the inland empire.

In addition to agricultural commodities, the Pacific Northwest produces a large quantity of lumber, limestone, fruit, and livestock. The largest white-pine sawmill in the world is located in Lewiston, Idaho.

Therefore, I respectfully urge this committee to recommend the construction of Ice Harbor lock and dam, which has been previously approved by the Congress of the United States.

Senator KNOWLAND. Next we have Mr. Herbert G. West, who is the final witness.

INLAND EMPIRE WATERWAYS ASSOCIATION, WALLA WALLA, WASH.

STATEMENT OF HERBERT G. WEST, EXECUTIVE VICE PRESIDENT

GENERAL STATEMENT

Mr. WEST. Mr. Chairman and gentlemen of the committee, my name is Herbert G. West, executive vice president of Inland Empire Waterways Association, with headquarters at Walla Walla, Wash.

I wanted to clarify a few of the points, Senators, that have been made and discussed, more especially the points on navigation that Senator Cordon has requested information on. First, however, I would like to recite just a short history.

PROGRAM DEVELOPMENT IN ECONOMIC BASIS

This program has been developed in the Pacific Northwest on an economic basis and not a political one. It has had the support of both of the major parties throughout the years. This committee has approved the Ice Harbor project for 4 years, and it has had the support of all the national defense agencies of Government along with the Secretary of the Interior and the Atomic Energy Commission and now with the change of administration this year, Secretary McKay has made some very strong representations to the Secretary of the Army and the Bureau of the Budget and to the Atomic Energy Commission and to the congressional committees with respect to the Ice Harbor program.

We are supported out there in our activities and program largely by taxing bodies such as county governments, port districts, city governments, along with labor, chambers of commerce, and farm organizations. The situation with reference to Ice Harbor navigation which is on the Snake River could be related to the construction of Bonneville Dam on the Columbia River.

INCREASED RIVER CARGO

Before Bonneville Dam we were only able to operate stern-wheel ships. With Bonneville coming in, we got into the now modern diesel-propelled twin screw type of boats with rather shallow draft. The Celilo Canal, as Senator Cordon will recall, was completed in 1915. From 1915 to 1938 until Bonneville Dam came in, we moved approximately 61 million tons of cargo in those 21 years.

In the first year of Bonneville Dam, some 61,000 tons were handled, and last year in 1952 it was one-million-five-hundred-thousand-some-odd tons. The river boats and companies operating on the Columbia River have not built a so-called river barge or a river tug for over 10 years. They are building deep-sea tugs, deep-sea barges, and are looking forward to substantial cargoes on the Columbia.

Consequently, the type of equipment that they had in the early days for operation on the Columbia River would be transferred to the operation on the Snake. Ice Harbor will drown out the worst rapids right around in that first 50-mile area, affording operations for 6 to 8 months.

Incidentally, we have had a case before the Interstate Commerce Commission, one of the companies seeking extension to Lewiston, Idaho. In that a decision was handed down May 3 by the Interstate Commerce Commission granting extension of these rights into Lewiston predicated on the information that was submitted that the Ice Harbor project would round out these rapids and the shallow draft equipment was available to operate under the conditions of open water beyond the Ice Harbor pool awaiting the time, of course, for the complete slack water development as it might come in.

I think about everything has been said with reference to the project. You gentlemen have had much testimony in the past several years, and we are finding a stronger unanimity of desire out there for construction of the Columbia River system. While we do not have a project in the Northwest that is not in controversy of one kind or another, whether that is proposed by the municipal groups or by the private utilities or by the Federal Government, we do have a growing unanimity. Of course, to make this system work it is estimated by the engineers that it will require some 27 million acre-feet of upstream storage, and all of your upstream storage projects are in controversy of one form or another, but that is working out very well, however, and pending the time that we can get the upstream storage to back up these downriver dams the further extension of these projects on the main stem of the Columbia and Snake Rivers is very essential.

Thank you.

Senator KNOWLAND. Your statement will be made a part of the record.

(The statement referred to follows:)

STATEMENT OF HERBERT G. WEST, EXECUTIVE VICE PRESIDENT, INLAND EMPIRE WATERWAYS ASSOCIATION

My name is Herbert G. West, executive vice president of the Inland Empire Waterways Association, the main offices and headquarters of which are located in Walla Walla, Wash. Ours is an organization composed of farmers, farm cooperatives, businessmen, chambers of commerce, public and private power organizations, labor groups, port districts, county and city governments, embracing a membership of approximately 60,000 representative of all the ter-

ritory in Oregon, Washington, and northern Idaho, contiguous to the Columbia and Snake Rivers.

It is a great pleasure for me to again present factual information regarding funds for immediate construction of Ice Harbor lock and dam on the Snake River. There have been many misstatements of fact presented in testimony before this committee on this project. However, time is a great factor, and we have found that all of the misstatements of fact presented by isolated selfish interests in the past have disappeared and facts have replaced propaganda and confusion.

Our association wishes to express its deep appreciation to the members of the Subcommittee on Civil Functions of the Senate Appropriations Committee for your indulgence and your wisdom over the years in ferreting out the facts. If this project had not been so worthy, I am certain it would have fallen by the wayside many years ago. However, due to its strategic national defense importance, during this critical time in our history, facts have outlasted propaganda and confusion. Today, we are in the position to be able to present to you, some additional facts which we trust will result in favorable action of this subcommittee on this very important project.

I will present facts in two parts. First, the national defense aspects and emergency considerations of this project; second, peacetime aspects regarding this key project in the overall development of the comprehensive, balanced program for the water resources of the Columbia River system.

This project is truly a multiple-purpose one, including benefits for navigation, power, irrigation and reclamation, and recreation. Even on an isolated basis this project is economically justified. Recent and prospective developments in the Hanford area seriously aggravate the already critical problem of providing an adequate power supply to this defense area and to the Pacific Northwest generally. Electric power requirements at all load centers of this immediate area are increasing at a far greater rate than were anticipated by load estimates.

I would point out that the electric energy demands of this area, including the Hanford works, have increased some 628 percent over the 1940–50 period and that the loads are estimated to increase an additional 44 percent by 1954 without taking into account the new expansion plans of the Atomic Energy Commission approved last year and now under construction.

The problem is further complicated by the fact that service to this strategic defense area must be of an extra high order of reliability. These factors combined emphasize the need for rapidly increasing the capacity of serving the mid-Washington and north-central Oregon areas. In addition, the urgency is manifest of accelerating the Federal power program in the Pacific Northwest to meet the region's industrial defense requirements.

Ice Harbor Lock and Dam is almost an ideal power supply facility in connection with service to the Hanford Works of the Atomic Energy Commission. No other hydroelectric plant in the Northwest power program could as effectively, except at much greater cost, serve the peculiar needs of this vital defense industry. Located at the back door, so to speak, this project could serve with an insignificant amount of additional transmission lines as an independent supply to the processing load. Reliability of service to this installation could be assured even with a major disturbance on the Federal high voltage grid, by reason of the fact that it could at all times be connected directly to the plant in such a way that both the Ice Harbor Dam and the plant could function on a segregated basis from the rest of the system. In the event of an emergency, Ice Harbor Dam would be able to supply approximately 203,000 kilowatts of firm power and 29,000 kilowatts during major emergencies, which would be sufficient to provide for the present and anticipated needs of this defense project. With construction commencing in fiscal year 1954, the first power would be on the line in December, 1957.

This commitee has already approved, and there has been spent in planning and designing the Ice Harbor project, approximately a million and a quarter dollars. Thus, the planning and design work for this dam is well advanced in relation to other projects. Additional phases of Ice Harbor are also ready for almost immediate construction. Thus, if it did become necessary "to pour the coal" on this project, to advance the completion date, it is ideally situated for this purpose.

I do want to call the attention of the members of this committee to the fact that this project has had the endorsement of the Governors of Oregon, Washington, and Idaho, public power agencies in the Northwest, private power utilities, port districts, granges, wheat leagues, farm bureaus, and chambers of commerce.

In addition, it has been 5 times recommended by the Bureau of the Budget. Last year, this project had the endorsement of the Defense Power Administration, Corps of Engineers, Bonneville Power Administration, the Secretary of the Interior, Munitions Board—every agency of the Federal Government that has anything to do with national defense, as well as the Atomic Energy Commission.

This year, Secretary of the Interior, Hon. Douglas McKay, in a communication to Congressman Hal Holmes, fourth district, State of Washington, on March 23, 1953, stated:

"I am in full agreement with what you say about the importance of Ice Harbor Dam. It is a multiple-purpose project and an important element in the comprehensive plan for the development of the Columbia River Basin. Its importance from the standpoint of national defense cannot be overemphasized. Power from Ice Harbor could assure the Atomic Energy Commission of an independent source of power for the Hanford Works so that that installation can be segregated from the remainder of the Northwest power system. This degree of reliability of service for the Hanford works has long been a prime objective of the Atomic Energy Commission. Furthermore, it would be consistent with the policy which the Atomic Energy Commission has followed in adding new generation in areas where they are expanding their power requirements.

"Unless this new independent source of power for the Atomic Energy Commission is provided, the power shortage in the Pacific Northwest region will be prolonged. You may be sure that I will bear this project in mind."

A copy of this letter was sent by Secretary McKay to the following:

Director of the Bureau of the Budget
Secretary of the Army
Chairman of the Atomic Energy Commission
Chief of Engineers, Department of the Army

The same position has been endorsed by the Atomic Energy Commission since the start of negotiations with Bonneville Power Administration for reliability of service as early as June 1950. Again this year, the Atomic Energy Commission directed its favorable comments to the Bureau of the Budget, Chief of Engineers, and the Secretary of the Army as to the need for reliability of service. Now that the expansion program is under way, the problem has been multiplied many times over.

It is seldom, indeed, in a national defense program that we can appropriate funds for construction of a much needed defense project during an emergency and still retain even greater values on long-range, peacetime economy. In the Ice Harbor lock and dam project, we combine the essential need for immediate national defense purposes and long-range, peacetime benefits.

In other words, the tax dollar that is being expended for national defense in the overall picture is, in a large measure, a one-way dollar; unless the purpose for which this tax dollar is expended can have the same or more value in our peacetime economy.

Just the opposite is true in connection with the appropriation for Ice Harbor lock and dam. While this project is urgently needed in the immediate present, after the emergency has subsided and passed, the same tax dollar expended on Ice Harbor becomes a peacetime dollar of equal merit as the one expended for national defense.

We would like to call your attention to the fact that in addition to national defense needs and peacetime values, Federal power projects in the Pacific Northwest are far ahead of their original repayment schedules.

As of June 30, 1952, Bonneville Power Administration has repaid approximately 28 percent of the capital investment, Bonneville Dam 31 percent, and Grand Coulee 17 percent. Thus, in a relatively short period of time, they will have repaid the original capital investment to the Federal Treasury, plus interest.

With more power revenue coming into the picture, we are certain that the Federal Government's investment in the Columbia River power system will be repaid well in advance of the 50 years generally considered to be the payout period. Thus, a national defense dollar in Ice Harbor is a high-grade investment of public funds.

This is truly the key project in a key river system development program that embodies multiple-purpose benefits. The project is not dependent upon any other project being constructed.

PROJECT ECONOMICS AND ECONOMIC FEASIBILITY

1. Statements have repeatedly been made that Ice Harbor is not economically feasible without construction of the other three lower Snake River Dams and that economic feasibility depends on the navigation benefits that accrue with the complete development of the authorized plan. Opponents state that the entire costs, accordingly, should be charged to power.

2. Substantial navigation benefits will result from construction of Ice Harbor alone. This project drowns out some of the most hazardous rapids on Snake River and would make possible annually, 5 or 6 months navigation to Lewiston. Contiguous to the 35-mile reservoir pool, and within economic truck haul distance, is a large wheat producing area, where definite plans for water shipment of wheat are now developing.

3. Economic status of the Ice Harbor project would vary during its life according to the stage of development of the project itself, and as influenced by regional power development. The various stages and accompanying project economics are shown on a following table. These conditions may be summarized as follows:

Case 1. Initial condition

This assumes the completion of the major Columbia Basin power projects now under construction, at the time that Ice Harbor project is completed. With a power installation of 215,000 kilowatts the project would increase the regional continuous power supply 135,000 kilowatts. Assuming that this power is transmitted to Hanford, the creditable power benefits after allowing for actual incremental transmission costs and losses (rather than pro rata share of the regional system costs and losses) would be $6,082,000. Navigation benefits would be initially $300,000; and partial irrigation and recreation benefits in the amount of $100,000 are assumed. On these bases, the project benefit to cost ratio would be 1.10.

Case 2

Assumes that, instead of actual incremental transmission costs, the project is charged with transmission costs and losses on a pro rata basis for the entire system. On this basis the creditable power benefits would be reduced to $4,950,000 and the benefit to cost ratio would be 0.91.

Case 3. Interim conditions

This assumes continued regional power development by the addition of 6 major projects to the 7 now existing or under construction, but assumes that only Ice Harbor of the lower Snake River dams is constructed. Charging transmission costs on a system basis, the power benefits would be $5,882,000. Navigation benefits would increase to $500,000, irrigation benefits to $186,000, and recreational benefits to $27,000. Project benefits to cost ratio would be 1.12.

Case 4. Phase C conditions

This assumes completion of the main control plan as recommended in the "308" report, including completion of the four lower Snake River dams. In accordance with the latest program of the Bonneville Power Administration and concurred in by this office, construction of these projects should be completed by about 1970 or not more than 14 years after completion of Ice Harbor. Hence phase C conditions should represent average condition for the major share of the life of the Ice Harbor project. Assuming 3 main power units installed, the project benefit to cost ratio under these conditions would be 1.25. Assuming 4 power units or 280,000 kilowatts installed (case 5), the project benefit to cost ratio would be 1.23.

4. The above analysis, and as summarized in the following table, indicates that even on an isolated basis, the Ice Harbor project without benefit of the other 3 lower Snake River projects would be economically feasible over its life period and under all but 1 of the various assumed transitory conditions. The one unfavorable condition (case 2) applies only to the initial stage of project life, and then only under the severe assumption that the project be charged with system transmission costs and losses several times so great as those actually incurred.

ICE HARBOR LOCK AND DAM, PROJECT ECONOMICS UNDER VARIOUS DEVELOPMENT CONDITIONS

Project construction costs, July 1952 levels: 3 power units, $130,340,000; 4 power units, $135,560,000

Case	Project stage of development	System stage of development	Total annual benefits	Total annual costs	Benefit to cost ratio
1	Probable initial condition in project life, considering actual incremental transmission costs.[1]	Major projects existing or under construction are assumed to be completed—8 projects.[2]	6,482	5,893	1.10
2	Same as 1, except charging transmission costs on a system basis.	Existing, under construction, and Ice Harbor—8 major projects.[3]	5,350	5,893	.91
3	Interim condition, representative of average project life if remaining Lower Snake dams not built.	Modified phase C with 13 major projects, including upstream storage on Snake River.[3]	6,595	5,893	1.12
4	Represents average project life assuming 3 main units installed and completion of recommended plan for full development of lower Snake and Columbia Rivers under phase C.	Phase 3, 16 major projects.[4]	7,345	5,893	1.25
5	Same as case 4, except 4 main units installed at Ice Harbor.	Same as case 4 [4]	7,666	6,214	1.23

[1] Incremental transmission losses and costs for interconnection of Ice Harbor to present transmission system (losses of 3 percent, costs at $3.50 kilowatt firm).

[2] Projects referred to follow:

Bonneville	Completed
Grand Coulee	Do.
Hungry Horse	Do.
Albeni Falls	Under construction
Chief Joseph	Do.
McNary	Do.
The Dalles	Do.
Ice Harbor	Authorized

[3] Projects referred to follow:

Bonneville	Completed
Grand Coulee	Do.
Hungry Horse	Do.
Albeni Falls	Under construction
Chief Joseph	Do.
McNary	Do.
The Dalles	Do.
Ice Harbor	Authorized
John Day	Do.
Priest Rapids	Do.
Libby	Do.
Upstream storage	Recommended
Glacier View (or alternate)	Do.

[4] Projects referred to follow:

Bonneville	Completed
Grand Coulee	Do.
Hungry Horse	Do
Albeni Falls	Under construction
Chief Joseph	Do.
McNary	Do.
The Dalles	Do.
Ice Harbor	Authorized
John Day	Do.
Priest Rapids	Do.
Libby	Do.
Upstream storage	Recommended
Glacier View (or alternate)	Do.
Lower Monumental	Authorized
Little Goose	Do.
Lower Granite	Do.

Other projects, most naturally, will benefit Ice Harbor as they will benefit greatly Bonneville Dam, the Dalles Dam, and McNary Dam when upstream storage is completed on the tributary system. On a peacetime basis, Ice Harbor project will do for the Snake River, navigationwise what Bonneville Dam did on the Columbia River. Bonneville Dam, by drowning out the worst rapids and making obsolete the inadequate barge locks at Cascade Rapids, made possible open-river navigation to the confluence of the Columbia and Snake Rivers at Pasco-Kennewick, Wash. Ice Harbor will drown out the worst rapid conditions in the Snake River, thus making it possible for the extension of inland navigation to Lewiston, Idaho, on an open-river basis, 4 to 6 months out of each year.

I am happy to report to you that there has been a steady increase in cargo tonnage on the Columbia River since September 1950. Upriver commerce for the year 1950 showed that 1,143,091 tons passed through Bonneville Lock that year, as compared with 1,376,688 tons in 1951 and 1,524,408 tons in 1952.

Low-cost, bulk-commodity transportation is a prerequisite, which is not now available, to the economic utilization of the rich resources of the Pacific Northwest and for the development of this area commensurate with the other regions of the country. Extension of the present Columbia River navigation system up the Snake River is a vital part of this important long-range development which must be undertaken before other logical steps in the necessary physical expansion can proceed.

Ice Harbor Reservoir, as the first unit of this extension, on an interim basis, will extend the present navigation system 35 miles to mile 45 on Snake River. This pool extends into a rich agricultural area and both farmer groups and navigators show definite interest in construction of terminals and navigating the full length of this reservoir as soon as it is a reality.

Careful analysis of current production, consumption, and tariffs has been made by a traffic expert for the Corps of Engineers with resulting estimates of early bulk commercial traffic on the Lower Snake River with the advent of Ice Harbor Dam alone as follows:

	Tons annually	Saving
Petroleum products	88,300	$83,362
Grain	331,700	277,298
Total	420,000	360,660

(For benefit studies $300,000 has arbitrarily been used.)

Other commodities such as farm supplies, cement, building supplies, etc., will also move by water in lesser quantities but with a definite saving to the region.

Navigation alone cannot satisfy the needs of the region as neither can rail, highway, or pipeline. The resulting development will require all types of transportation and will expand all modes. Furthermore, under our present economy, rail equipment could not be made available to handle even the present waterborne traffic of this region and in times of national emergency, the facilities must be available to provide alternate means of transportation and relieve rail equipment for trouble areas.

The existing and discussed pipelines for petroleum products into this area can satisfy at best a small fraction of the total needs of the region. Present experience is that river traffic in petroleum products on the Columbia River has had a marked increase even during the period of service by pipeline and a very favorable and important downriver movement of special petroleum products to California has developed as a result of the construction of the pipeline into Pasco, Wash., with its terminus adjacent to available navigation.

With the present practices of truck haul, an extension of commercial navigation up the Snake River, even on a seasonal basis resulting from Ice Harbor Dam alone, would expand greatly the area served by joint water-truck service with marked savings to the entire region. The resulting lower cost of transportation for Northwest wheat to tidewater would also permit much more favorable competitive status in world markets.

The association is appreciative of the indulgence of this committeee and your willingness to restore funds cut off by the House committee during the past 4 years. In reading past reports of the conference committee and the reports of the House committee, we find that the only reason funds have not been included for Ice Harbor Lock and Dam has been due to the question of the so-called extermination of species of salmon that would result from the construction of the project.

This fallacy has been effectively and completely exploded by statements last year from the Director of United States Fish and Wildlife, wherein he stated:

"I think there is no question that species as such are not in danger of extinction. There is no question but what there will be some losses, and if the dam is built, the fishery interests are prepared to prescribe the best possible devices known to modern science to keep those losses at a minimum."

The official record shows that the Corps of Engineers has worked cooperatively with United States Fish and Wildlife and the Washington, Oregon, and Idaho Departments of Fisheries in connection with fish facilities for McNary Dam and also for the proposed Ice Harbor Lock and Dam. The Ice Harbor project for fish facilities is essentially identical to McNary Dam. The total lifts are within 10 feet of each other. The method of collection is the same and the type of ladder for ascending is the same. The collection of migrating adult fish is simpler and more direct because of the relative size of the projects. Ice Harbor Reservoir is 35 miles long, relatively narrow, with measureable currents throughout its length for the movement of fish upstream. With the extensive collection system, controlled hydraulic conditions in the ladder, and favorable currents in the reservoir, no delay should be experienced in the passage upstream. Experience at Bonneville cannot substantiate any loss in traveltime through that reach of the river. In fact, the energy required for passage through Ice Harbor Reservoir should be considerably less than presently required to transit the existing channel with its shoals, several rapids, crosscurrents, and high velocities.

The director of fish and game of the State of Oregon has testified that 95 percent of spawning of salmon entering the Snake River is above Lewiston, Idaho. In consultation with the Corps of Engineers, I have been reliably informed that the creation of Ice Harbor Reservoir in the lower 35 miles of the river should not affect materially such effective reproduction as takes place in this reach of the river since only about half of the reservoir length will be of general depths prohibiting spawning and controlled water surfaces and reduced bed movement should enhance many areas suitable for spawning.

The same general conditions would apply to each of the other reservoir areas as the stream is developed.

The director of the department of fish and game of the State of Idaho has stated:

"It is our firm belief that if adequate fishways are installed in the down-river dams from the mouth of the Salmon River and below Hells Canyon that the fish runs which normally come in from the sea can be preserved."

With the construction of The Dalles Dam, the number of salmon coming upstream for spawning should be enhanced many fold. There is a terrific take by the Indians at Celilo Falls; and, even with this condition existing, the official record, since the advent of the dam program and the completion of the Bonneville Dam in 1938, shows that total salmon coming over Bonneville Dam in 1938 was 471,144. In 1952, the total was 875,786.

It is hoped that the Senate Committe on Appropriations, after reviewing the testimony presented on behalf of Ice Harbor lock and dam will in its wisdom resolve that funds to initiate immediate construction of this project in the amount of $4,900,000 is in the national interest and will so recommend and will insist upon this item being kept in the conference report of this year.

In addition, there are a number of projects under construction in the Pacific Northwest which have always had the support of this association. We specifically call attention to a few of these, urging appropriation of funds as recommended by the Bureau of the Budget. These projects are as follows:

(1) McNary, $28,185,000; (2) Albeni Falls, $7,200,000; (3) The Dalles, $37,429,000; (4) Chief Joseph, $25,000,000; (5) Detroit (in the Willamette Valley), $1,300,000.

Senator YOUNG. Mr. Chairman?

Senator KNOWLAND. Senator Young.

TRANSPORTATION COSTS

Senator YOUNG. These transportation costs are far more important to agricultural commodities than most people realize. Our area produces a lot of grain. Until a short time ago we shipped a great deal of oats to the New England area. Because of an increase in transportation costs in the United States we have lost our market and we cannot get our oats beyond Milwaukee, Wis.

Let me give you some figures on that. The freight rate from Coutts, Alberta, to Fort William on a bushel of wheat is 16 cents. Right across the line on the Montana side the rate from Sweet Grass to Duluth is 45.3 per bushel. Over in North Dakota at Crosby the cost of shipping a bushel of oats to Duluth is 15.87 cents a bushel.

From Regina, a comparable point on the Canadian side, the cost is 6.4 cents per bushel, which again is about three times cheaper. We are talking about Duluth on the United States side and Fort William on the Canadian side, which are comparable ports on the Great Lakes. Unless we have some lower transportation costs, the United States producers are going to suffer badly in the future. I think the producers in the Pacific Northwest are wise in looking toward cheaper rates through navigation.

Mr. WEST. Senator, could I make a short comment on that? I want to explain to you how this is operating on the Pacific Northwest. Where we have water transportation today on the Columbia River, wheat, which is the all-rail rate from that territory to the coast, is on the level with 1930 all-rail rates.

Now immediately above that where we do not have the competition, our rates have taken general increases and are some 73 to 75 percent higher in that area than the 1930 all-rail rate. On petroleum products we are still operating because of the joint operation of rail and water and truck and water, we are on the level with the 1934 rail rates for distribution of petroleum products in there. We find this, that transportationwise while that has taken place, still the railroads, the Union Pacific principally, paralleling the Columbia River is each year showing increased profit and operation.

It has not disturbed them, but the people have been able to enjoy these lower rates and continue to market their products. We have found a 50-percent reduction in costs since this program has been in, and we find that the private utilities and the cooperative utilities today with about a 50-percent lower rate showing a higher net income so it works economically.

Senator YOUNG. We are facing a serious situation in our area since the tariff is practically nothing on most farm commodities and the Canadians outsell us.

Senator KNOWLAND. Thank you very much.

Mr. WEST. Thank you, gentlemen.

Senator JACKSON. Mr. Chairman, Senator Magnuson and myself would like to file statements for the record.

Senator KNOWLAND. That will be done.

(The statements referred to follow:)

STATEMENT URGING AN APPROPRIATION TO START CONSTRUCTION ON ICE HARBOR LOCK AND DAM BY WARREN G. MAGNUSON, UNITED STATES SENATE, AND HENRY M. JACKSON, UNITED STATES SENATE

Mr. Chairman, this committee is already familiar with the project now under discussion—namely, Ice Harbor lock and dam on the lower Snake River in the State of Washington. You have received testimony on the project in every session since 1949.

On three separate occasions this committee and the Senate have voted funds to get Ice Harbor lock and dam into construction. Last year, you will recall, that you approved $3 million in construction funds. As on two previous occasions, the item was lost in conference with the House.

I strongly feel that there exists at least a moral obligation on the part of this committee and the Senate to provide funds this year.

Most Senators will remember the controversy which arose at the close of last session over the conference report on the Army civil functions bill. Two dams were involved—the Hartwell Dam on the Savannah River and Ice Harbor.

Several of us were prepared to hold Congress in session—even though the Republican National Convention was then getting under way in Chicago. Our purpose was to give the Senate conferees an added opportunity to convince the House members of the conference that they should go along with Senate action with respect to these two projects.

The Congressional Record of Monday, July 7, 1952, contains in some detail the arguments I made for rejecting the conference report and insisting that the Senate's action be accepted by the House conferees. In that discussion, the then chairman of the Senate Appropriations Committee made a commitment that early in the present session your committee would—for the fourth time—approve an appropriation for Ice Harbor lock and dam.

On the basis of that commitment, I finally withdrew my opposition to the conference report and let it go through.

I realize, Mr. Chairman, that one Congress cannot bind another. Neither can the chairman of any committee make a binding commitment upon his associates and successors. Nonetheless, I believe the situation I have described does provide an additional basis for favorable consideration of the request we are making to you.

Mr. Chairman, the budget transmitted to Congress in January contained $4.9 million construction funds for Ice Harbor lock and dam. In the revised budget this item was eliminated. Technically, therefore, there is no budget request before you at the present time.

It is my conviction that recommendations made by the administration through the Bureau of the Budget have no binding effect upon this committee or upon the Congress. In past years we have provided funds for items where no request from Bureau of Budget was before us. Conversely, we have deleted items recommended to us by the Bureau of the Budget. Members of this committee and Congress must exercise their own independent judgment. That is why we are here today, presenting the Ice Harbor case to you.

This project was authorized in 1945. It is the first of a series of four dams on the lower Snake River. Ice Harbor, however, is engineeringly and econimically feasible—standing alone. It will pay back to the Treasury funds appropriated for it, whether or not the three companion projects are ever constructed. It is a sound investment.

The project is multipurpose in nature. It will provide over 200,000 kilowatts of firm power—power desperately needed in the area. When completed, Ice Harbor will give our great atomic energy plant at Hanford an independent and dependable source of kilowatts. It will make possible irrigation of over 100,000 acres of land.

In addition, the pool behind the dam will flood the worst rapids on the lower Snake River—thereby providing open river navigation to Lewiston, Idaho, for at least 6 months of the year. Navigation benefits are in excess of $300,000 annually.

In past years this committee and the Senate have shown a commendable understanding of our problems in the Northwest. You have recognized we are an expanding area—that our greatest resource is falling water—that hydroelectricity generated in the Northwest benefits the entire Nation—that, despite the national aspects of our development, Federal funds invested in projects like

Ice Harbor are returned to the Treasury with interest. The users of electricity in the immediate area repay the Federal investment in power facilities in full with interest—even though the wealth and industries created strengthen the Nation as a whole.

There is general agreement among private and public electric utility groups in the Northwest that expanding requirements demand the addition to our power capacity of over one-half million kilowatts a year. Independent experts and businessmen concur. The supply will not catch up with demand until some time in the 1960's—even though we do add one-half million kilowatts or more to generated capacity each year.

Failure to provide a new start in fiscal 1954 will retard industrial and agricultural growth in the Pacific Northwest—and, hence, agricultural and industrial growth in the Nation. The strength of the Nation, of course, depends upon the economic—the industrial—strength of its various parts.

Mr. Chairman, the Atomic Energy Commission has informed the Department of Interior and the committees of Congress that the separate and dependable source of power Ice Harbor would provide them is urgent—is related to national security.

The Fish and Wildlife Service has certified that the construction of this dam would not do irreparable damage to the fish runs. There is overwhelming evidence, growing out of our experience at Bonneville Dam that the salmon, not ony can but do, negotiate these structures in their migrations. By actual count 470,000 salmon went over Boneville ladders in 1938. By 1951 this number had increased to 648,000.

There is no conclusive evidence to support the oft-repeated assertion that 15 percent of fingerlings, migrating downstream, are lost at each dam. I will provide for the record a statement exploding this allegation.

I would like inserted, as a part of my remarks, a letter from the Atomic Energy Commission, addressed to me in May 1952. The situation therein described remains the same today. Also, I want to insert a brief commentary on the allegation I have just mentioned, relating to the loss of downstream migrants.

In addition I submit for the record a letter from Fish and Wildlife Service, asserting that the fish facilities at Ice Harbor will handle that problem.

In closing I urge your committee this year to sustain and repeat the good judgment you have exercised in the past—namely, approve an appropriation to get this project under construction.

Mr. Chairman, I have just been handed a copy of a letter the present Secretary of Interior, Mr. Douglas McKay, sent to Congressman Hal Holmes on March 23, 1953. Later this same letter was transmitted to the Director of Bureau of Budget, Secretary of Army, Atomic Energy Commission, and Chief of Engineers, as representing the official position of the Secretary on Ice Harbor.

Secretary McKay strongly emphasizes the importance of an immediate start on Ice Harbor for the dual purpose of providing the Atomic Energy Commission a separate, independent source of power and as a readily available means of attacking the Pacific Northwest's power shortage.

The remarks I have made to the committee represent the views of both Senator Henry M. Jackson and myself. Rather than burden the committee with separate testimony we agreed that I make this joint statement.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C., March 23, 1953.

Hon. HAL HOLMES,
House of Representatives,
Washington 25, D. C.

MY DEAR MR. HOLMES: Thank you for your kind letter of February 17. I very much appreciate your congratulatory message and good wishes.

I am in full agreement with what you say about the importance of Ice Harbor Dam. It is a multiple-purpose project and an important element in the comprehensive plan for the development of the Columbia River Basin. Its importance from the standpoint of national defense cannot be overemphasized. Power from Ice Harbor could assure the Atomic Energy Commission of an independent source of power for the Hanford works so that that installation can be segregated from the remainder of the northwest power system. This degree of reliability of service for the Hanford works has long been a prime objective of

the Atomic Energy Commission. Furthermore, it would be consistent with the policy which the Atomic Energy Commission has followed in adding new generation in areas where they are expanding their power requirements.

Unless this new independent source of power for the Atomic Energy Commission is provided, the power shortage in the Pacific Northwest region will be prolonged. You may be sure that I will bear this project in mind.

Sincerely yours,

DOUGLAS MCKAY,
Secretary of the Interior.

ATOMIC ENERGY COMMISSION,
Washington, D. C., May 27, 1952.

Hon. WARREN MAGNUSON,
United States Senate.

DEAR SENATOR MAGNUSON: In accordance with your request to the Atomic Energy Commission for a statement of its views on the Bonneville Power Administration's proposal to construct Ice Harbor Dam, we submit the following:

The Atomic Energy Commission's Hanford works located in Washington State receives its operating power from the Bonneville Power Administration. In order to maintain our rate of production with the requisite degree of safety, we must have a reliable, trouble-free, noninterruptable source of power supply. Because of overloading and other factors on the Bonneville system, we have over the past few years experienced several power outages which have caused loss in plutonium production and created potential hazards.

As you know, we are presently completing several new facilities at our Hanford works. These facilities will add to our power requirements and thus to our demands on the Bonneville system for additional electric energy.

In addition, the Atomic Energy Commission has proposed an expansion program which includes further expansion at Hanford. We are hopeful that the fund request for this proposed expansion will be submitted to the Congress within a few days. If this program is approved by the Congress, substantially as submitted, it, plus our normal load growth, will cause our power requirements for Hanford to more than double our present day load. We would expect the Bonneville Power Administration to supply this power since our present and proposed facilities are within the area served by the Bonneville Power Administration.

On May 5, 1952, the manager of our Hanford operations office wrote the Bonneville Power Administration and advised them of this potential load growth. In this letter it was stated that we assumed Bonneville would supply this load and if necessary to do so, would cut nonessential users off to provide adequate service to the Commission. Bonneville Power Administration replied to this letter on May 9, 1952, indicating their willingness to supply the added requirement but stating that the only way they can do so is through added system capacity. We understand from informal discussions with Bonneville that there are three alternate mthods by which they could strengthen their system to meet this requirement. We have not examined these three alternate methods in detail because we do not believe it is our function to determine which method would be most feasible. We feel this to be the responsibility of the Bonneville Power Administration. It does appear to us, however, that the proximity of the Ice Harbor Dam to our Hanford works would be a feasible and sound means of strengthening the Bonneville system so that they would have added system capacity to enable them to supply Hanford with its increased requirement and to afford added assurance against power interruptions.

Should you desire any more information, we will, of course, be pleased to supply it.

Very truly yours,

M. W. BOYER, *General Manager.*

ORIGIN AND VALIDITY OF ASSERTION THAT 15 PERCENT OF FINGERLINGS MIGRATING DOWNSTREAM ARE LOST AT EACH DAM

Between 1939 and 1945 the Fish and Wildlife Service of the United States Department of Interior ran 15 experiments in an effort to determine the effect of Bonneville Dam on fingerlings migrating downstream. In their experiments the Service tagged and released approximately 1,400,000 fingerlings. In each

experiment an equal number of tagged fingerlings were released above and below the dam.

The cooperation of all sports and commercial fishermen was obtained. When any adult fish bearing a tag was caught, the tag was returned to the Fish and Wildlife Service. Thus, the Service would be able to estimate the number of fingerlings that safely negotiated the trip over the dam or through the turbines, as compared to the number surviving from among the fingerlings released below the dam.

During the experiments only 4,100 tagged fish were caught and reported to the Fish and Wildlife Service. This represents a sample of less than one-third of 1 percent. No reputable statistician would base conclusions on a sample of this size.

Here are the results: In 5 experiements the sample showed that more fingerlings released above the dam survived than those released below the dam. In 10 of the experiments the sample showed that more fingerlings released below the dam survived than above. In these 10 experiments, the losses of fingerlings released above the dam ran from 11 to 14 percent greater than those released below the dam.

In recent months an independent statistician at Reed College in Oregon, has analyzed the results of the 15 experiments. His conclusions are, and the Fish and Wildlife Service concurs, that there is no sound basis for concluding that there is any greater loss of fingerlings released above the dam than among fingerlings release below the dam—first, because the sample is too small; second, because 5 of the experiments were in favor of fingerlings released above the dam; and third, because the actual count of adult fish going over Bonneville Dam shows an increase between 1939 and 1951 of approximately 200,000 salmon. In 1939 about 470,000 adult salmon went over the fish ladders. In 1951 approximately 670,000 were counted in.

This, then, is the true situation with reference to the origin and validity of the continued but erroneous assertion that a 15-percent loss of fingerlings migrating downstream occurs at each dam. This explains why the Fish and Wildlife Service has agreed to the statement contained in the Secretary of Interior's letter to Senator Magnuson dated June 20, 1952; namely: "The use of 15-percent loss at each dam has not been substantiated by experience."

A search of the testimony given over the years before congressional committees will reveal that the United States Fish and Wildlife Service has not asserted that a 15-percent loss of fingerlings occurs at each dam. It is noteworthy that it is the commercial and State fishery people who have erroneously made this contention.

WARREN G. MAGNUSON,
United States Senator.

DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
Washington, D. C., June 20, 1952.

HON. CLARENCE CANNON,
Chairman, House Appropriations Committee,
House of Representatives, Washington, D. C.

MY DEAR MR. CANNON: The Senate has voted a $3-million appropriation to initiate construction on Ice Harbor Dam. I judge the civil-functions bill will soon be in conference. Since there has been controversy in regard to the Ice Harbor project, with particular reference to its affect on the salmon runs, I thought it desirable to supplement the information contained in Mr. Day's letter addressed to you under date of March 18, 1952.

In that letter Mr. Day stated that our plans for handling upstream and downstream migration of anadromous fish will eliminate any threat of exterminating any species of salmon. He indicated further that we believe there will be some losses, but that the fishery interests are prepared, through the best possible devices known to modern science, to keep those losses at a minmium—thus insuring that everything possible is being done to perpetuate the fishery resources in the Columbia River watershed as they may be affected by the Ice Harbor project.

Plans for Ice Harbor Dam call for fish facilities similar to those now under construction at McNary Dam, including collection systems, ladders from each shore, and temporary ladders for passage while the dam is under construction. The two permanent ladders at Ice Harbor consist of a series of interconnected

stepped pools 30 feet long and 20 feet wide with a rise of 1 foot at each step, at an estimated cost to the Corps of Engineers of approximately $9 million. We will incorporate in the Ice Harbor fish facilities any improvements that may be dictated by the operating experience at McNary Dam. The McNary passageways will be in operation for at least 2 years prior to construction of the permanent facilities at Ice Harbor. The McNary facilities represent an improvement over facilities installed at Bonneville Dam in 1938.

While the Corps of Engineers has the responsibility of construction, our field representatives have cooperated fully with the corps in planning and designing fish facilities for this project. Thus, the latest scientific and biological knowledge available to us will be incorporated in our overall plan for protecting the fishery resource at this project.

The records of 15 years of experience in operating the dam facilities on the Columbia River, with the provision of fish-passing facilities, fish hatcheries, and other means of offsetting losses, have been reasonably effective in preserving salmon runs on that river.

The Fish and Wildlife Service will cooperate in every way with the Corps of Engineers in assuring that fish passageways are integrated in the Ice Harbor project. This Service will also cooperate with the corps to make certain that the salmon runs are properly handled during the construction period.

Mr. Albert M. Day, the Director of the Service, is out of the city. I, therefore, am sending you this letter, which explains the position of this Service with reference to the fish problem at Ice Harbor lock and dam.

Sincerely yours,

J. L. KASK,
Assistant Director.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C. June 20, 1952.

Hon. WARREN G. MAGNUSON,
United States Senate, Washington, D. C.

MY DEAR SENATOR MAGNUSON: I appreciate your letter of June 19, 1952, in which you express your deep interest in the continued comprehensive development of the Columbia River. I am pleased to set out in this letter the answers to the three questions raised in the House committee report in connection with the Ice Harbor lock and dam, Washington.

In regard to the question that Ice Harbor Dam will not have an irreparable effect on the fish runs the following information has been obtained in collaboration with the Fish and Wildlife Service of this Department.

The fish facilities to be constructed as an integral part of the Ice Harbor project are similar to fish ladders now under construction at McNary Dam, including collection system, ladders from each shore, and temporary ladders for passage during construction. The two Ice Harbor ladders will be 30 feet long and 20 feet wide, with a rise of 1 foot at each step. Design and construction of Ice Harbor fish facilities will benefit from at least 2 years of operation experience at McNary Dam. McNary ladders have been improved as a result of the experience at Bonneville Dam.

Over the years there has been a continued effort to evaluate the effect of construction of main-stem dams on the Columbia River fishery resource. The records of 15 years of operation of the dam facilities on the Columbia River with the provision of fish-passing facilities, fish hatcheries, and other means of offsetting losses have been fairly effective in preserving salmon runs on that river. The provision of proper fish facilities, such as will be installed at Ice Harbor Dam, will eliminate any threat of exterminating any specie of salmon by that project.

The use of the 15-percent loss at each dam has not been substantiated by experience. Scientific developments today indicate a continuing fishery resource on the Columbia River if the Congress will provide necessary appropriation for a continuing cooperative engineering and biological research program.

With respect to the fishery of the Cowlitz River the Federal Power Commission's license to construct this project requires approval of the plans for fish-handling facilities in advance of construction to insure propagation of the fish runs in this stream. The license requires that the licensee cooperate with the Fish and Wildlife Service of the Department of the Interior and the Department of Fisheries and Game of the State of Washington in the preparation of

such plans and requires modification to protect fish as may be needed during operation of the project. In the case of the Pelton project on the Deschutes River the Department recommended facilities for the protection of the migratory fish in the event a license was issued for the project. Similarly these plans must be approved by the Fish and Wildlife Service and the Oregon State Game and Fish Commission.

In light of the above facts I can assure you that the Fish and Wildlife Service of this Department will cooperate in every way possible to minimize any possible effects of Ice Harbor on the fishery resource of the Snake River.

In answer to the question as to whether the power needs of the area cannot be supplied from other sources I refer to my testimony before the Senate Subcommittee on Civil Functions Appropriations. At these hearings I directed attention to the seriousness of the power shortage in the Pacific Northwest by pointing out that all private and public utilities in the Pacific Northwest were united as to the need for an additional 500,000 kilowatts annually for the next several years to meet the normal load growth in the area; the equivalent of a hydrogenerating plant the size of Bonneville each year. I further advise the committee that superimposed on the existing defense loads in the Pacific Northwest is a proposed major expansion of the Hanford Works of the Atomic Energy Commission. We have explored all possible means of supplying the additional Hanford load and have arrived at a decision that Bonneville Power Administration cannot undertake to serve the additional load at Hanford because such service would be at the expense of contractual commitments to other loads in the area. Unless new generation is provided for the expanded Hanford load, the power supply of the region will be crippled and there will be cutbacks to industrial defense loads, private utilities, and public agencies.

Attached is a copy of the statement of Dr. Paul J. Raver, Administrator of the Bonneville Power Administration, before the Senate Civil Functions Appropriation Committee. It reinforces my position as to absolute necessity for immediately constructing Ice Harbor Dam. Dr. Raver's statement presents facts and figures on possible alternative proposals for providing the electrical service for the expansion at Hanford Works of the Atomic Energy Commission and clearly proves that there is no economical alternative to Ice Harbor Dam. Further, it makes evident that any alternative which does not provide additional new generation will seriously cripple the power supply of the Pacific Northwest and will result in cutbacks to the industrial defense loads, private utilities, and public customers in the area.

The problem of providing an adequate and reliable source of power for the Atomic Energy Commission's Hanford Works has been a matter of grave concern to this Department since initial construction of this vital defense plant. The Bonneville Power Administration has been conferring with the atomic energy engineering people at Hanford continuously since June of 1950 in order to arrive at an engineering solution which would assure an independent and reliable source of power for the Hanford Works. After exploring all possibilities it has become obvious to all concerned that the immediate construction of Ice Harbor, which is located only 7 miles from the plant, is the only economical and practical solution to this problem.

As recently as June 9, 1952, Mr. Gordon Dean, Chairman of the Atomic Energy Commission, stated in a letter to me, copy of which is attached: "It is our understanding that Senator Magnuson used this letter (containing information to the effect that AEC proposes to double the powerload at Hanford) in connection with Senate Appropriations Committee hearings on the proposed construction of Ice Harbor Dam.

"At the same time, however, we feel that if Congress approves the AEC proposed expansion at Hanford and does not provide additional generating capacity on the Bonneville system, it will be necessary for some Government agency, possibly the Office of Defense Mobilization, to critically review the consumers on the Bonnneville system to determine whether or not service can be curtailed to any of the consumers without material interference to national defense and the growing economy of the Northwest, in order to supply power needed by our Hanford Works."

My office has contacted the Corps of Engineers relative to the question as to whether navigation benefits of Ice Harbor, without construction of other projects, are significant. Attached is a statement furnished by that agency. In summary the attached statement prepared by that agency reveals that average annual commerce on and through the Ice Harbor pool over the life of the project is estimated at 2,547,000 tons, and will consist of the upstream movement of

petroleum products, building materials, and manufactured products, and the downstream movement of limestone, ores, wheat and other agricultural products, and timber. Average annual navigation benefits for Ice Harbor, based on savings in transportation costs, are estimated at $1,250,000. When completed, Ice Harbor will provide navigation benefits of $300,000 annually. These benefits will increase progressively as other authorized navigation facilities are completed. It may be noted, also, that with only the initial navigation benefits, the Ice Harbor project is still justified economically, and has a favor-benefit-cost ratio.

In closing I wish to take this opportunity to remind you that appropriations for the construction of the authorized Ice Harbor project have been continuously sought since 1949. Its extreme importance to our defense effort has now been attested to by the Defense Electric Power Administration and it has had the complete endorsement of the Office of Defense Mobilization, the Bureau of the Budget, and the Executive Office of the President. There is complete unanimity among all defense agencies of the administration that this project should be constructed and integrated into the Pacific Northwest grid in such a manner as to provide an independent power supply for the Hanford Works of the Atomic Energy Commission.

The Department of the Interior again wishes to give assurance that the Fish and Wildlife Service will collaborate with the Corps of Engineers in providing fish facilities which will be required to protect and preserve the migratory fish. I am heartened by the fact that the Senate has seen fit to provide $3 million to initiate construction of this project and trust that the facts which have been set forth herein will answer all questions in order that this important work can go forward immediately.

Sincerely yours,

OSCAR CHAPMAN,
Secretary of the Interior.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington D. C., May 20, 1953.

Hon. WARREN G. MAGNUSON,
United States Senate,
Washington, D. C.

MY DEAR SENATOR MAGNUSON: As you will see from the attached correspondence, I indicated to the Bureau of the Budget that the Ice Harbor Dam project is of vital importance to national defense in connection with the Hanford Works of the Atomic Energy Commission. I am also enclosing a copy of a letter which the General Manager of the Atomic Energy Commission sent to the Director, Bureau of the Budget. In this letter the Atomic Energy Commission has indicated that the addition of Ice Harbor Dam which is proposed for location on the Snake River near the Hanford Works would provide a much more reliable power situation than now exists at Hanford.

I fully agree with your statement that we must have a new start in the Pacific Northwest if present power shortages are to be alleviated. You will see that the attached letter to Congressman Holmes points out that unless this new independent source of power for the Atomic Energy Commission is provided, the power shortage in the Pacific Northwest region will be prolonged.

Sincerely yours,

DOUGLAS MCKAY,
Secretary of the Interior.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C., March 23, 1953.

Hon. JOSEPH M. DODGE,
Director, Bureau of the Budget,
Washington 25, D. C.

MY DEAR MR. DODGE: Enclosed for your information is a copy of my letter to Congressman Hal Holmes with reference to Ice Harbor Dam project. This project is of vital importance to national defense in connection with the Hanford Works of the Atomic Energy Commission.

Sincerely yours,

DOUGLAS MCKAY,
Secretary of the Interior.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., March 23, 1953.

Hon. HAL HOLMES,
House of Representatives, Washington, D. C.

MY DEAR MR. HOLMES: Thank you for your kind letter of February 17, 1953. I very much appreciate your congratulatory message and good wishes.

I am in full agreement with what you say about the importance of Ice Harbor Dam. It is a multiple-purpose project and an important element in the comprehensive plan for the development of the Columbia River Basin. Its importance from the standpoint of national defense cannot be overemphasized. Power from Ice Harbor could assure the Atomic Energy Commission of an independent source of power for the Hanford works so that that installation can be segregated from the remainder of the Northwest power system. This degree of reliability of service for the Hanford works has long been a prime objective of the Atomic Energy Commission. Furthermore it would be consistent with the policy which the Atomic Energy Commission has followed in adding new generation in areas where they are expanding their power requirements.

Unless this new independent source of power for the Atomic Energy Commission is provided, the power shortage in the Pacific Northwest region will be prolonged. You may be sure that I will bear this project in mind.

Sincerely yours,

DOUGLAS MCKAY.

Senator JACKSON. We would like to express our appreciation for the courteous way that the committee has arranged to have our presentation.

Senator KNOWLAND. We are only too glad to do so.

(The following communication from the Hon. Wayne Morse, a United States Senator from the State of Oregon, was received:)

UNITED STATES SENATE,
COMMITTEE ON PUBLIC WORKS,
May 28, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Army Civil Functions Subcommittee, Appropriations Committee, United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: In the Pacific Northwest the power shortage last winter exceeded the danger point. Several thousand industrial workers were thrown out of work. Less well known has been the cramping of the regional economy for some 5 years past because of inadequate generating capacity. The Northwest has not been able to increase electric power for defense plants or industrial operations in some years.

A cursory review of the normal electric load of the region for the next few years indicates some relief from power curtailment for the years 1953–58 if the Congress keeps on schedule the major Northwest dam projects now under construction. These dams will take care of the normal load, but will not provide adequately for any new heavy industry.

By 1958–59 the region will drop below the danger point where a low-water year will cause even greater unemployment unless remedial steps are taken promptly. Since 5 or 6 years are needed to build a hydroelectric power project, the challenge of how to meet 1958–59 loads is up before the Congress this year.

Fortunately, the Corps of Engineers has plans ready and the Congress has approved four dams on the lower Snake River capable of almost a million kilowatts. Included in this four is the Ice Harbor Dam project. The approval is found in the Rivers and Harbors Act of 1945. An early controversy between the Corps of Engineers and the Fish and Wildlife Service has been settled amicably. The Fish and Wildlife Service now endorses the lower Snake River dams. Former President Truman urged the start of construction of Ice Harbor Dam and he recommended $4.9 million in the 1953–54 budget for that purpose. The Atomic Energy Commission and the Bonneville Power Administration have urged construction. The failure to include Ice Harbor in the revised budget, and the lack of appropriations for that project in the House constitutes a serious injury to the power program of the Pacific Northwest.

The four Snake River projects will permit navigation 495 miles inland to Lewiston, Idaho. Yet most of the costs of these navigation projects will be recovered from power revenues. An added advantage of the four dams is the ability to get power on the line as soon as each project is finished.

Your committee already has a large amount of data on Ice Harbor Dam. I urge the reinstatement of the $4.9 million for Ice Harbor in the budget before you in order to insure a normal supply of electricity through 1960–61, and sufficient appropriations for other Pacific Northwest projects to permit their completion just as expeditiously as possible. I am concerned that reductions made with respect to other Federal dams under construction in this area will slow their completion and thereby unnecessarily prolong our precarious power situation throughout the Pacific Northwest States.

Sincerely,

WAYNE MORSE.

Senator KNOWLAND. At this point in the record we will insert the justification for the item "Fish and Wildlife Service."

(The justification referred to follows:)

ESTIMATE

Lower Columbia River fish sanctuary program (transfer to Fish and Wildlife Service)

The States of Washington and Oregon, together with the United States Fish and Wildlife Service, are cooperating in the development of the Columbia River fishery by construction of facilities and improvement on the Lower Columbia River and tributaries to offset the effects of dams and diversions, pollution and other detrimental influences upon anadromous fish throughout the Columbia River system. This program consists of removal of log jams and other obstructions in the stream, bypassing of natural falls and other works for stream improvement to provide access to new spawning and rearing grounds for migrating fish, improvement of inadequate ladders at existing dams for passage of fish, screening of diversions to prevent loss of young downstream migrants, construction and operation of egg-collecting stations and hatcheries and research laboratories essential for their successful operation, and transplanting of fish to establish and sustain new runs.

Funds in the amount of $3,950,000 are included for transfer to the United States Fish and Wildlife Service for continuation of this program during fiscal year 1954. The amount of $3,768,400 would be utilized for construction of necessary works and the amount of $181,600 for the planning and design of additional facilities.

LOWER COLUMBIA RIVER FISHERIES DEVELOPMENT PROGRAM

STATEMENTS OF WILLIAM HAGEN, JR., CHIEF, SECTION OF SALMON OPERATIORS, AND JAMES T. McBROOM, COORDINATOR, OFFICE OF RIVER BASIN STUDIES

PREPARED STATEMENT

Mr. HAGEN. Mr. Chairman, I am William Hagen, Jr., in charge of certain salmon operations in the United States for the Fish and Wildlife Service. I have with me Mr. James T. McBroom, coordinator Office of River Basin Studies.

With the committee's indulgence, I would like to read a statement regarding the lower Columbia River fisheries development program.

Senator KNOWLAND. I might say that the entire statement may go into the record at this point, and you can read it or brief it.

Mr. HAGEN. I can brief it.

Senator KNOWLAND. Fine.

(The statement referred to follows:)

LOWER COLUMBIA RIVER FISHERIES DEVELOPMENT PROGRAM

This program was conceived by the fisheries agencies of the Northwest States and the Fish and Wildlife Service about 1945 when it appeared that many more major dams would be constructed in the Columbia River Basin. It was anticipated that the erection of only a few additional dams in the migratory routes of salmon would greatly reduce the stocks of these valuable fish. The program evolved has as its objective the maximum development of the salmon populations and productivity in the lower Columbia River area, generally below McNary Dam, and below the contemplated dams expected to be most damaging to the resource.

The salmon of the Columbia River have been important to the economy of the Pacific Northwest for 150 years, and have been necessary to the Indians for centuries. Today the annual average catch by commercial, sport, and Indian fishermen totals about 31 million pounds, having a value of about $20 million. A pertinent consideration should be of the fact that this annual production of salmon could be maintained perpetually without cost were the existing production areas to remain available to the salmon, other factors being constant.

Additional dams are being constructed and others are proposed, all of which will be adverse to the maintenance of the resource. This is true because each dam presents an obstacle to adult salmon going upstream to the stream of its birth. Each dam delays the salmon for 1 or a number of days. When the salmon enters the river, it has a time schedule to meet for successful reproduction. The adult fish must arrive at the spawning area, be it 50 or 500 miles upstream, at the time of appropriate water temperatures and when the fish is fully mature. A sequence of dams may, in the aggregate, delay the arrival of the fish until water temperatures are too low, or the fish may be required to spawn ineffectually before arrival at the spawning area.

Large dams also cause loss of young salmon on their downstream migration to the ocean. This loss results from passage through turbines and over spillways. Although the loss at each dam may be relatively small, in the aggregate the losses at a number of dams could be serious. Thus, a series of dams over which the upstream-bound adults and the downstream fingerlings must pass could cause sufficient mortalities directly or indirectly to greatly reduce the upriver runs of salmon. Until such time as research is able to determine ways and means of safely passing fish at dams we will continue to experience these mortalities.

The present program in the lower Columbia River area will develop to the maximum the salmon populations and productivity in the tributary streams below McNary Dam. This is being done by the clearing of obstructions to fish passage from the tributary streams. Such obstructions consist of debris accumulations, logging dams and waterfalls. Some of the larger waterfalls are laddered to permit the upstream passage of adult salmon. By these means, hundreds of miles of heretofore inaccessible spawning areas will be made available by the time of completion of the construction phases of the program. In addition, existing hatcheries are being enlarged and new hatcheries built for the purpose of providing stock to more rapidly populate the tributary streams with maximum numbers of salmon. The output of the hatcheries also will be utilized to compensate for periodic poor natural reproduction, and the hatcheries will contribute directly to the Columbia River salmon fishery.

Although the lower river program is expected to result in a considerable increase in salmon production from the area, we do not anticipate being able to compensate fully for the losses of upriver runs of salmon caused by dams. However, it is expected that a portion of the valuable upriver races of salmon may be preserved.

It should be noted that the development or reestablishment of lower-river populations of salmon cannot be accomplished in 1 or 2 years. The life cycle for these fish is 4 years. In other words, results of the improvements for spawning in the fall of this year would not be apparent until the return of the resulting young fish in the fall of 1957. To provide adequate time for the accomplishment of the objectives of the program 2 cycles, or 8 years, of full operation of the program should be permitted. It had been intended originally that the facilities of this fisheries program would be entirely complete prior to the construction of additional dams. However, two major dams, McNary and The Dalles, are under construction in the migration route of salmon while program facilities are not one-

half complete. To be effective in preserving the salmon without an intervening major decline of the fishery, the facilities for the fisheries program must be complete as soon as possible.

The lower-river fisheries program is financed entirely with Federal funds. These funds are utilized by the Fish and Wildlife Service and the States of Oregon and Washington for program improvement. Although all improvements and construction are financed by the Federal Government, the States first secure necessary lands and easements. The States are also active in research and other activities of benefit to the maintenance of the salmon resources of the Pacific Northwest.

Program results are not yet apparent but there are indications of increased spawning and of survival of young salmon in cleared streams. Previous experience with hatcheries indicates the success we may expect. Grand Coulee Dam resulted in great dependence upon hatcheries to transfer and maintain upriver runs. This activity has proved very successful. Likewise, on the Sacramento River in California our hatchery operations have countered the harmful effects of Shasta Dam and have made substantial contributions directly to the commercial and sport salmon fisheries.

Continuity of construction in the lower-river program is necessary to provide at the earliest date the facilities for maintenance of the Columbia River fishery.

STATUS OF FUNDS, APRIL 30 AND JUNE 30, 1953

Consideration of the unexpended and unobligated balances shown in the following table should include the following facts:

1. Inasmuch as prior appropriations have not included funds for advance planning and engineering, these activities, as well as land acquisition and the procurement of easements, could not be initiated until after receipt of construction funds for the individual projects.

2. The April 30 unobligated balance of $3,130,517 is the remaining portion of the 1953 appropriation of $3,574,000, which sum was not available for obligation and expenditure until September 1952, after which planning and engineering were started.

3. Construction activity is at its peak during the summer and early fall. By the time of receipt of 1954 funds (expected not sooner than September) it is anticipated that the unobligated balance of construction and operation and maintenance funds will be reduced to approximately $500,000.

Details of balances remaining follow.

	1949–53 appropriations [1]	Balances—Apr. 30, 1953		Estimated balances—June 30, 1953	
		Unexpended	Unobligated	Unexpended	Unobligated
Construction:					
Fish and Wildlife Service	$2,895,027	$780,555	$435,677		
Oregon	2,533,902	1,466,160	1,291,780	$1,900,000	$1,650,000
Washington	3,269,137	1,752,373	1,190,431		
Total	8,698,066	3,999,088	2,917,878		
Operation and maintenance:					
Fish and Wildlife Service	377,377	111,443	39,980		
Oregon	273,192	149,751	92,808	50,000	50,000
Washington	283,465	152,638	79,851		
Total	934,034	413,832	212,639		
Total (construction and operation and maintenance):					
Fish and Wildlife Service	3,272,404	891,998	475,647		
Oregon	2,807,094	1,615,911	1,384,588	1,950,000	1,700,000
Washington	3,552,602	1,905,011	1,270,282		
Total	9,632,100	4,412,920	[2] 3,130,517		

[1] Does not include $102,000 for fish and wildlife studies in connection with rivers and harbors projects.
[2] Additional contracts approved or being processed Apr. 30–May 19, total, $706,000.

EFFECT ON SALMON RUNS

Mr. HAGEN. The lower Columbia River program was, as many of you know, evolved a number of years ago by the Fish and Wildlife Service and fisheries agencies of the States of Oregon and Washington to counteract insofar as possible the expected damage of the Columbia dams under construction and to be constructed to the salmon resource. It was believed and we still believe firmly that the dams will cause considerable damage to the upriver runs, the most valuable runs of salmon in the Columbia.

During the past 10 years the average annual take of salmon attributed to the Columbia has been 31 million pounds. This we and the States have valued at about $20 million annually.

The lower Columbia River program is our means of counteracting to the greatest extent possible the harmful effects of the dams. With the Federal funds provided, we have since 1949 undertaken to clear tributary streams below McNary Dam to open up additional spawning area. We have built hatcheries to augment natural spawning and to rapidly develop the spawning potential of the lower Columbia River streams.

When this program is complete, we anticipate that we will be able to mitigate to a great extent the loss of upriver runs of salmon. The States of Washington and Oregon have participated fully in the program. They acquire the lands upon which the structures are to be placed, and the Federal Government provides all funds. Each year we have an operation and maintenance cost which is increasing as the facilities are provided. If we complete the program by 1957, we will then require approximately $2 million annually to finance the program thereafter.

STATE CONTRIBUTION

There is in our agreements more or less with the Bureau of the Budget an understanding that the States of Washington and Oregon should assume some of the annual operating costs in future years as it becomes apparent that the salmon losses have in fact been mitigated.

Mr. Chairman, this program is necessary to the maintenance of the valuable Columbia River fishery and the construction phases must be continued if we are to have a reasonable opportunity to save the upriver runs before the completion of McNary and the Dalles Dams.

Senator MUNDT. What do you mean by the agreement with the Bureau of the Budget?

Mr. HAGEN. Discussions between the Bureau of the Budget and the Department of the Interior, including the Fish and Wildlife, have resulted in an informal understanding, which may result in future cost reductions to the Government.

Senator MUNDT. Have they been firmed up or are they in the negotiation stage?

Mr. HAGEN. They are in the negotiation stage.

Senator MUNDT. May I inquire whether this improvement program also includes Alaska or just for Oregon and Washington?

Mr. HAGEN. This includes only the Columbia River, although the methods may be applicable in Alaska.

Senator KNOWLAND. Could you give us some indication as to the reason you have substantial unexpended and unobligated amounts?

PLANNING FUNDS

Mr. HAGEN. Yes, sir; I can. Principally that has been due to the fact that we have never had planning funds in this program. When we receive our appropriation, then we must start our planning. In this present budget for the first time is included a sum for planning for the 1955 construction program. We do have a substantial balance, but for example we have approximately $900,000 contracted for during the month of May, indicating increase in construction activity in the spring and summer.

We anticipate that our unobligated balance as of June 30 will be in fact somewhere around $1 million instead of the $1,700,000 we have shown in the statement. Furthermore, we do not anticipate receiving the funds immediately after the fiscal year, and these hold-over funds carry us through until we receive the 1954 appropriation.

Senator KNOWLAND. Thank you very much.

Mr. HAGEN. Thank you, gentlemen.

Senator KNOWLAND. There will be inserted in the record the justification statement for an item under "General investigations" related to transfer of funds to the Fish and Wildlife Service for studies of projects of the Corps of Engineers throughout the United States.

(The statement referred to follows:)

CIVIL WORKS APPROPRIATION, CORPS OF ENGINEERS, FISCAL YEAR 1954

A. General investigations (transfer to Interior—Fish and Wildlife Service):

2 (c) Fish and wildlife studies $55,000

JUSTIFICATION

These funds will help finance studies by the Fish and Wildlife Service of projects in both the construction and investigation programs of the Corps of Engineers. The funds are for studies of projects throughout all of the United States and in Alaska.

The act of August 14, 1946 (60 Stat. 1080), requires that the Fish and Wildlife Service report on each proposed project planned by the Corps of Engineers as well as other Federal construction agencies. That act also authorizes the transfer of funds appropriated to the corps and other Federal construction agencies to the Fish and Wildlife Service for the purpose of making these studies.

Investigations by the Fish and Wildlife Service in most cases reveal means and methods by which dams, reservoirs, drainage channels, and local flood-control developments can be constructed and operated in such a manner as to result in a minimum of damage to fish and wildlife resources. These means and methods of preserving these resources include minimum releases of water below dams for fish life, replacement of wildlife habitat around a reservoir area by vegetative planting, and the like.

The average cost of project studies for this purpose by the Fish and Wildlife Service is only $1,900. This includes an average of $2,500 for larger flood-control and multiple-purpose projects and an average of $1,300 for local flood-control and minor navigation projects.

Expenditures of these moderate sums provide information on which are based rather minor modifications in construction and operation plans which result in conserving fish and wildlife resources. This is particularly important in view of the growing interest of an expanding population with more leisure time in out-of-door activities associated with hunting and fishing. In most cases, these activities are the principal bases for recreational use of new reservoirs and other water-development projects built by the Federal Government.

Fish and wildlife studies in accordance with the act of August 14, 1946, are needed on 34 of the projects included in the revised construction budget of the Corps of Engineers for fiscal year 1954. Most of these projects were authorized prior to 1946. Twenty-seven fish and wildlife studies are needed on the 30 pre-

authorization studies included in the revised budget of the corps for fiscal year 1954. This makes a total of 61 corps projects on which fish and wildlife investigations should be made in fiscal year 1954.

Funds made available directly to the Fish and Wildlife Service are inadequate to carry out detailed studies. Provisions of law cited above authorize transfers from the corps for this purpose. Financial planning by the executive branch contemplates that adequate transfer funds will be provided in the Corps of Engineers' appropriation to carry out detailed investigations in accordance with the magnitude of the corps' civil-works program as determined by the Congress.

STATUS OF FUNDS

As of April 30, 1953, $9,980 was unexpended and unobligated. There will be no balance remaining on June 30, 1953.

Senator KNOWLAND. Senator Sparkman, we would be glad to hear from you at this time.

ALABAMA RIVER IMPROVEMENTS

STATEMENT OF HON. JOHN SPARKMAN, A UNITED STATES SENATOR FROM THE STATE OF ALABAMA

GENERAL STATEMENT

Senator SPARKMAN. Thank you, Mr. Chairman.

Mr. Chairman, I am going to make a very brief statement. There are two gentlemen here from Alabama that are going to give you some detailed evidence. I am not sure that both of them will make a statement, but one of them at least will make a statement with your permission.

Let me say that I am presenting this brief statement of mine on behalf of both myself and Senator Hill. Senator Hill is in attendance at another Subcommittee on Appropriations at the present time, and he could not be here and asked me to state that this statement represented his views also.

I want to give a brief statement regarding certain improvements on the Black Warrior, Warrior, and Tombigbee Rivers in Alabama.

WARRIOR RIVER PROJECT

The original improvement for the Warrior River system was authorized in 1875. Construction of the first locks was authorized in 1899, and between 1903 and 1915 17 locks and dams were completed at a cost of about $12 million.

The Warrior River navigation system is now undergoing a modernization program. The existing locks are old and antiquated, being 285 feet by 52 feet with about 10-foot lifts.

TUSCALOOSA LOCK AND DAM

Construction of a lock and dam at Tuscaloosa to replace the original locks and dams 10, 11, and 12, was authorized in 1935 and completed in 1940 at a cost of $4,500,000. It has a 460-foot-by-95-foot lock and a lift of 30 feet.

Mr. Chairman, I stated that Senator Hill would not be present, but I see that he tore himself loose from that other subcommittee, and I am glad he is here because now he can back up everything I

will say. As a matter of fact, he was down there when a lot of this construction was going on a long time ago.

Senator KNOWLAND. May I say that I have asked Senator Mundt if he would preside for me because due to Senator Taft's absence I will have to go up to the floor very shortly.

Senator SPARKMAN. Certainly.

DEMOPOLIS LOCK AND DAM

The Demopolis lock and dam was authorized in 1945 and is under construction. It will replace locks 4, 5, 6, and 7, built from 1903 to 1908, with a modern lock 600 feet by 110 feet with a 40-foot lift.

Locks 1, 2, and 3 will be replaced by the Jackson lock and dam; locks 8 and 9 by the Warrior lock and dam; and a new lock 13 will replace the existing locks 13, 14, 15, and 16. These new locks will be the same size as the Demopolis lock, which is now under construction.

One major factor in the schedule of replacing the existing locks and dams has been their obsolescence and physical condition. This situation causes the Warrior lock and dam to be the next one on which construction should be initiated.

By the way, Mr. Chairman, when I refer to obsolescence, I want you to understand that that really is not a strong enough term, and when Mr. DeBardeleben testifies before you he will show you some pictures of the existing locks and dams. It is simply unbelievable that a system of locks and dams in one of our major navigable streams would be carried on in the condition that they are in.

The Warrior River system is one of our major inland water transportation systems.

INDUSTRIAL INCREASE

Traffic has reached about 3 million tons annually and is increasing rapidly. Industry along the Warrior River is also increasing.

The Warrior Basin includes the richest mineral-bearing area in the southeastern part of the United States. Principal minerals in the area consist of iron ore, coal, limestone, sand and gravel.

Port Birmingham is connected to Birmingham by a 20-mile railroad. The port is located near the head of the waterway, which extends downstream to Mobile. Complete towing service on the stream is available.

Mr. Chairman, I might state one interesting thing, and that is that the Federal Barge Line operating on this Warrior River has its only profitable operation anywhere on this system over this river carrying this freight and using these antiquated facilities which are almost falling to pieces, locks and dams.

Principal commodities handled are iron ore, iron and steel products, coal, crude oil, gasoline, logs, pulpwood, limestone, and packaged freights.

An increase in iron ore shipments is expected shortly with the completion of a new terminal at Mobile to handle South American ores.

BENEFITS TO NAVIGATION

Completion of the waterway will provide many benefits to navigation.

The primary benefits are the saving of time of tow operation by eliminating the necessity of breaking up tows and multiple lockages through the small locks, and the use of larger equipment that will be permitted.

Greater towing speeds will also be possible, and operation of the new locks mechanically instead of by hand will save time and reduce costs. Fewer employees will be needed for maintenance and operation of the larger and modern lock than for the several smaller locks that will be replaced.

ESTIMATED COST

The estimated cost of the Demopolis lock and dam is $20,560,000, of which $11,910,800 has been appropriated to date.

The original budget for fiscal year 1954 included $6,400,000 for this project. The revised budget reduced that amount to $4,900,000. The amount in the original budget should be restored in order that this unit will be completed at an early date, and the benefits from the Federal investment realized.

In the appropriation act for fiscal year 1953, an item of $100,000 was included for planning on the Warrior lock and dam. This project was approved by the Bureau of the Budget as essential for national defense. The estimated cost of the unit is $19,100,000. The original budget included $1,900,000 for initiation of construction on the Warrior lock and dam.

This is an emergency project. The original dams are stone-filled timber cribs set on pile foundations. Some of them are leaking very badly and most of them have leaky foundations in danger of being undermined at any time. If one of these old dams should go out, the entire waterway would be rendered inoperative.

REVISED BUDGET

The revised budget eliminated the entire amount. Restoration of the $1,900,000 is requested to permit early initiation of construction on this unit. Planning is well advanced and construction can start immediately upon funds being made available.

The original budget also included $50,000 for planning on the Jackson lock and dam. It is believed that the revised budget cuts will necessitate deletion of those funds from the amounts for planning.

Careful consideration of these requests is desired when the civil functions bill comes over from the House so that the final appropriations will be adequate to carry the work forward at a suitable pace on this worthwhile navigation project.

This is a slack-water development, and there is sufficient water available for lockage, leakage, and evaporation.

The commerce is there now and is increasing. An investment has been made which is in danger of being nullified. The benefit to cost ratio is about 3 to 1. Thus, there is no doubt but that the project is a sound investment of Federal funds to modernize the waterway and keep the traffic moving.

Senator HILL. My colleague, Senator Sparkman, made a very fine speech, speaking for me as well as for himself, and I want to emphasize to the chairman the proposition that this present system, as Senator Sparkman so well brought out, is old, obsolete, and uneconomical. We have these small locks and that takes all kinds of time.

Senator MUNDT. How long has this been in operation?
Senator SPARKMAN. Fifty years or more.
Senator MUNDT. The old locks are that old?

CONDITION OF OLD LOCKS

Senator SPARKMAN. Some of them are that old. I think the first one was completed in 1902, and with this tremendous amount of traffic on the river, they are among the few remainng locks that are operated by hand.

Senator HILL. Think of that. Of course, these new modern locks and dams that we are asking for would mean that they would be operated mechanically and save a lot of time.

You have to break up your tolls very often because the lock is so small. It takes so much time to get into a lock.

These new locks would be larger, and you could use larger equipment and it would make many savings. Then, as Senator Sparkman brought out, this is an emergency project, Mr. Chairman, in that these dams are liable to wash out.

Senator SPARKMAN. Mr. De Bardeleben has some pictures that will graphically show that situation.

Senator HILL. If any one of these dams washes out, it is just like breaking a link in a chain. The whole system would be worthless. I want to emphasize that and, as Senator Sparkman brought out, the benefits in the cost on a ratio three to one, which you and I know is a good safe economical ratio.

The Warrior dam and lock has been found to be essential to national defense.

Senator MUNDT. Let me ask either of you whether you know the action taken by the House on this request?

HOUSE ACTION

Senator SPARKMAN. I do not know what the action was. I was in Alabama and just returned this morning. I saw the article in the paper that the committee in its report to the House put some definite slashes in the bill, but I do not see either of these mentioned and I do not know.

Senator MUNDT. The Clerk tells me that they allowed the full amount for Demopolis, $4,900,000.

Senator HILL. We are asking for $6,400,000. Mr. Chairman, the Demopolis Dam is under construction and has been under construction for some time.

Senator SPARKMAN. It was started in 1950.

Senator HILL. That is right. We feel that all the dictates of the economy and wise and businesslike construction are that we go ahead and finish that dam. To make the progress that we should make, we must have the full $6,400,000.

Senator SPARKMAN. That is correct. This is a project that is nearing completion and it is the economic thing to do to go on and complete it. This Warrior lock and dam is an emergency matter and I think that when you see the pictures you will understand it.

Senator MUNDT. The Clerk tells me that the House did not allow anything for planning the Warrior lock and dam.

Senator SPARKMAN. We want then to double our emphasis. I am not sure, Mr. Chairman, that you were here when I pointed out something that I think is quite relevant. That is the heavy traffic on this river using these dams that could go out any minute, and it is the only system of the Federal barge line that is operating at a profit.

Senator HILL. The chairman comes from the Midwest and is familiar with the Mississippi inland waterway, and this Warrior part is the only part that is in the black all of the time.

Senator MUNDT. Do you have anything to put into the record to that effect?

Senator SPARKMAN. We can get the information.

Senator MUNDT. You should put that in as a part of your statement.

Senator SPARKMAN. I would be glad to do so.

Thank you, Mr. Chairman.

(The information referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
May 27, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Army Civil Functions Appropriations Subcommittee,
The Capitol, Washington 25, D. C.

DEAR BILL: When I was testifying before your subcommittee a couple of days ago in support of funds for improvements on the Black Warrior, Warrior-Tombigbee Rivers in Alabama, I made a statement that the Warrior system was the only system of the Federal Barge Line operating at a profit. Senator Mundt was very much interested in this statement and asked if I could place in the record figures to substantiate this statement.

The Inland Waterways Corporation has furnished me figures which show that the Warrior system has operated at a profit since World War II. I list the profit for each calendar year as follows:

1947	$60,290.89	1950	$429,898.87
1948	230,409.53	1951	360,181.37
1949	81,217.03	1952	303,675.00

I am advised further that the Mississippi system did operate on a profit for the calendar year 1952. Their profit was $75,709. However, in each of the calendar years from 1947 to 1952, the Mississippi system sustained a loss.

Should your subcommittee wish additional information, I shall be pleased to try to get it for you.

With best wishes and kindest personal regards, I am,

Sincerely,

JOHN SPARKMAN.

Senator HILL. May I emphasize that there is plenty of water for this project.

Senator MUNDT. Do you have some other witnesses?

Senator SPARKMAN. Mr. DeBardeleben is here from Birmingham.

Senator HILL. Mr. DeBardeleben, you are president of the Warrior River Development Association. Will you give the official title?

WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION, BIRMINGHAM, ALA.

STATEMENT OF NEWTON H. DeBARDELEBEN, PRESIDENT

GENERAL STATEMENT

Mr. DEBARDELEBEN. I am president of the Warrior-Tombigbee Development Association. The Warrior Development Association is a nonprofit organization and its sole function is to give public expression

to the desire of the residents of that valley for the orderly and economical development of the river system.

The Warrior-Tombigbee is one of the major inland waterways of this great Nation and is navigable for 467 miles, from the Port of Mobile to the Gulf, from above the industrial center of Birmingham. It serves these two districts and the intervening areas as a vital area of low-cost water transportation, and as a major source of industrial water.

It is one of the oldest navigable streams in the country. Congress first gave authorization for navigation work in 1871.

COMMERCE HANDLED

In 1951 almost 3 million tons of commerce traveled over this system. Because of certain industrial developments now under construction, we feel certain that within the next 3 years this tonnage will double and will reach 6 million tons. In early 1954, a movement of iron ore from Venezuela will begin and will reach very rapidly 3 million tons a year. The present plans are that half of this tonnage will move over the waterway.

Also in 1954, a movement of coal from the Birmingham area to steam electric plants now under construction near Mobile will start. This movement will rapidly reach 2 million tons, and it is presently planned that about half of it will move over the waterway.

In addition, the transportation of petroleum products up the river is rapidly increasing, and very recently a regular movement of benzol from Birmingham to Texas has started on the river. This together with the natural growth of commerce will bring this river to, we feel, at least 6 million tons.

BUDGET FOR DEMOPOLIS LOCK AND DAM

The system which carries this commerce needs many improvements to stabilize waterflow, prevent floods, and modernize the small, costly and obsolete locks. The present budget before you, gentlemen, carries it in an item in the amount of $4,900,000 to continue new construction of the Demopolis lock and dam. That will replace 4 of the obsolete present locks and dams. That project is now at about 58 percent completion, and the item in the present budget would bring it to 80 percent completion.

This is a reduction from the original item of $6,400,000. We feel that you gentlemen should give favorable consideration to this item. It will permit the orderly continuation of this construction.

We recognize and are in full accord with the desires of the administration to delay improvements and modernization of waterways until it can be done within the framework of a balanced budget. However, a situation exists on this Warrior-Tombigbee which we feel requires attention and expenditures, not so much to modernize and improve the waterway as to preserve and prevent the destruction of the facility that now exists.

EXISTING LOCKS AND DAMS

Existing locks and dams Nos. 8 and 9, were constructed in 1902 and 1903. Both dams can aptly be described as horse and buggy. They are of timber crib construction.

Senator HILL. With considerable leakage as it is.

Mr. DEBARDELEBEN. The locks are of masonry construction. The walls are of masonry but the floors are wooden. Leaks in dam No. 8 recently became so bad that to preserve the dam from destruction, the engineers were forced to face part of it on the upstream side with sheet-steel piling. Another leak has developed which will require further sheet-steel pilings to face an additional 50 feet.

I have some pictures, Mr. Chairman, which I think will describe the conditions much better than I can.

The river wall of lock No. 9 is undermined from 3 to 4 feet and is supported entirely by the original timber piling put in place in 1902. This condition was discovered when the lock was unwatered for a complete inspection. At the same time, it was found that the wood sheet piling surrounding the river wall is in a state of advanced deterioration and is missing entirely in some sections.

Because of these conditions, the wall is extremely unstable and a breathing movement of the wall occurs whenever a tow enters or leaves.

Dam No. 9 has settled from two-tenths of a foot to as much as one-half a foot over a 75-foot section. This settling took place in 1949 and 1950. The crest timbers have washed downstream. The old wood cribbing of the dam is badly deteriorated and 40 to 50 percent of it is believed to be entirely missing.

FUNDS REQUESTED

Our primary purpose in appearing before this committee today is to reemphasize the concern which we understand from newspaper accounts has been expressed to this committee by Maj. Gen. Samuel D. Sturgis, Chief of Engineers, of the ever-present danger that 1 or both of these 2 locks and dams may wash out at any time and close the entire Warrior-Tombigbee system to navigation. We wish to bring before this committee our earnest plea that it reinsert into the 1954 budget sufficient funds to begin construction of Warrior lock and dam as a replacement for dams Nos. 8 and 9.

As we have said before, we are in agreement with the desires and the plans to economize in Federal spending, but we fail to see how the failure by Congress to protect a multimillion dollar public investment, that has already been made into a great natural asset, represents economy. We rather believe that true economy will dictate a small further expenditure to protect that investment.

The only insurance against closure of the waterway is to begin work promptly to replace these two locks and dams which stand as a constant menace to the continuation of navigation on the Warrior-Tombigbee system.

The Corps of Engineers has reported dam No. 9 to be in such a deteriorated state that it is beyond repair except for minor patching. The engineers do not consider it practical to rehabilitate lock No. 9 as this would entail complete replacement of the river wall, and close the river to navigation for a year.

Such rehabilitation of locks and dams 8 and 9 would cost approximately $8.5 million including maintenance for a period of 10 years, and even when completed would leave this river system saddled with two facilities obsolete in design and construction.

PLANS AND SPECIFICATIONS

The plans and specifications for Warrior lock and dam are ready. That is to the credit of this committee which recognized the seriousness of this situation and restored planning money in the 1953 budget. That planning money was appropriated. The plans provide for a dam sufficient in height to create a deep-water pool for 80 miles, and to provide a 22-foot-long lift and 110- by 600-foot-long chamber.

The Warrior lock and dam would be located in a cutoff canal across a large bend in the river and when completed would eliminate 5 miles of river travel. Estimated cost of construction is approximately $19 million and construction time approximately 3 years.

We believe and we hope that you will agree that it is the better economy to start construction of Warrior lock and dam immediately rather than impose an unjustified risk of closing the entire waterway to navigation. Not only is the investment of the people of this country and the navigation facilities being jeopardized but the investment of 20 boat and barge companies as well as the investments of numerous industries located along the course of this waterway are also being jeopardized.

CONSTRUCTING WARRIOR LOCK AND DAM

The budget originally proposed for 1954 carried an item of $1,900,000 to begin construction of Warrior lock and dam. That money has now been completely eliminated from the revised budget. We respectfully and urgently request the members of this committee to reconsider the Warrior lock and dam on the Warrior-Tombigbee waterway in Alabama and restore to the 1954 civil works budget adequate funds to allow a year's work to proceed immediately on the structure.

Mr. Chairman, I have a prepared statement that I would like to place in the record.

Senator MUNDT. The statement will be inserted in the record.

(The statement referred to follows:)

STATEMENT OF WARRIOR-TOMBIGBEE DEVELOPMENT ASSOCIATION

Three representatives of the Warrier-Tombigbee Development Association are here today: Newton H. DeBardeleben, president of Birmingham, Ala.; Braxton B. Carr, executive vice president, of Birmingham; and Wallace I. McElroy, a member from Mobile, Ala., and a representative of the largest operator on the river. In order to conserve the time of the committee and at the same time present our testimony as comprehensively and as briefly as possible, Mr. Carr will present our principal oral testimony. Mr. McElroy has a prepared statement which he desires to insert in the record.

We very much appreciate the time taken by this committee to hear us. Our group, the Warrior-Tombigbee Development Association, has its office and staff in Birmingham; is a nonprofit organization whose sole function is to give public support to a program for the orderly, economical development of a river system which is a navigation artery and a water source for the most heavily populated and most highly industrialized area of Alabama. We appear before you today not as individuals, but as representatives of a very large segment of the population of Alabama who have voluntarily joined our association and are

working in its program or who have voluntarily endorsed the association's program through their chambers of commerce, their civic clubs, and through their State, county, and city governing bodies.

Now we shall ask Mr. Carr, the executive vice president of the association, to present our case.

The Warrior-Tombigbee waterway, which connects the iron and steel center of Birmingham-Bessemer-Fairfield with the great gulf port city of Mobile, serving these districts and the intermediate area as vital water carrier and as a major source of their industrial water, is one of the oldest navigable streams in the country. Congress gave the first authorization of navigation works on this waterway in 1871.

The faith of the Congress which led to the expenditure of the people's money to improve the river has been justified as a single comparison will demonstrate. There are 27 other improved navigable river systems in the southeastern coastal area, reaching from the Savannah River on the Atlantic coast to the Pearl River on the Gulf coast. These 27 streams have over 1,900 miles of channel. In 1951 these 27 streams carried a total of 1,681,802 tons of commerce. In the same year, the Warrior-Tombigbee carried 2,712,891 tons of commerce over its 467 miles of channel, continuing a steady upward march in growth of tonnage started 5 years ago after a slump during World War II.

Principal commodities transported on the river in 1951 were iron and steel manufactures, coal, limestone, petroleum products, iron ore and concentrates, pulpwood, sulfur, logs, oyster shells, sugar, earth, clay, sand, and gravel.

Certain commerce has come into being and other commerce is about ready to start movement which undoubtedly will increase the river traffic considerably. A new plant in the upper reaches of the river started a movement of crude oil during the latter part of 1952 which will add a 100,000 tons of commerce annually. A regular movement of benzine has just started, moving by river barge from the Birmingham district into Texas. The exact amount is unknown, but it will be a regular, substantial movement. The movement of South American iron ore through the port of Mobile to mills in the Birmingham district will start in the first quarter of 1954. This iron-ore movement will gradually increase to 3 million tons anually. What percentage of this movement will be shipped upstream into the Birgingham district by water depends upon the condition of the river and the economics of water movement. A similar situation exists in regard to contemplated downriver coal movement from the Birmingham district to the Mobile area. This movement will gradually increase to approximately 2,000,000 tons annually and again the condition of the river and the economics of water movement will determine the amount shipped by barge.

Originally there were 17 locks and dams built on Warrior-Tombigbee to provide a shallow channel and a total lift of 256 feet. Three of the original locks and dams were replaced in 1940 with a single facility at Tuscaloosa, Ala., which leaves 14 of the original locks and dams in place.

These 14 old lock chambers are of interest themselves. They are 52 feet wide by 280 feet long, big enough to handle only four of the 500-ton barges in use on the river system. The towboats on Warrior-Tombigbee can handle 11 of these barges. But since the boat can enter a Warrior-Tombigbee lock chamber with only four barges, multiple lockages are required and these multiple lockages take an average of 2½ hours at each lock.

The amount of commerce on the river is remarkable in our opinion for another reason also. All the dams in the lower reaches of the river are low, 9 to 12 feet. They create shallow pools in a stretch of waterway which has many sharp bends and sandbars. Boats are slowed and frequently grounded on the sandbars.

But our purpose before this committee today is to call to your attention and ask you to do something about a situation that is even more serious than any of these drawbacks to economical navigation that have been mentioned.

Before getting into our principal purpose before the committee, however, we want to call to your attention the $4,900,000 appropriation which is in the 1954 budget before you for action and which is for continuing construction of the Demopolis lock and dam at Demopolis, Ala., about midway on the waterway between Birmingham and Mobile. The Demopolis facility will provide a 40-foot lift, a lock chamber 110 feet wide by 600 feet long, a deep-water pool 55 miles long, and will replace four of the obsolete and wornout locks and dams now in use. This lock chamber will be adequate to handle the largest tow in a single operation and the deep-water pool above the dam will permit tows to operate at 5 to 6 miles an hour where they average from 2½

to 3 miles an hour now. The savings to barge operators will be tremendous, savings which ultimately will be reflected in many finished products, undoubtedly. For instance, on the basis of commerce which moved in 1951 through these four locks that will be replaced, barge operators would have saved a total of 225 days had Demopolis lock and dam been in use. Stated another way, we find that had Demopolis lock and dam been in use in 1951, barge operators, using the same equipment and the same crews at the same expense could have made 18½ more round trips on the river.

Demopolis lock and dam will be about a $21 million structure. A total of $11,910,800 has already been appropriated and will bring the facility to 58 percent completion. The $4,900,000 requested in the 1954 budget will bring the structure to 80 percent completion.

On its merits we are firmly convinced Demopolis lock and dam deserves to be completed on schedule, not only for the contribution it will make to the economy of our State and region but to the economy of this whole Nation. Our industries which use the river for transportation produce many basic products which ultimately find their way into many phases of this Nation's construction, trade and commerce. For these reasons we earnestly request that you approve the $4,900,000 requested to continue work on Demopolis Lock and Dam.

Of even more pressing immediate importance to us in Alabama and to the overall inland waterway transportation system because our waterway is a key part of it, is a situation that involves the two locks and dams on the waterway immediately above the last of the four which will be replaced by Demopolis lock and dam. These two facilities are known as lock and dam No. 8 and lock and dam No. 9.

The 52-foot wide by 280-foot long chambers of locks 8 and 9 are both of masonry construction with timber crib approaches and wooden floors. Both dams are of timber-crib construction. They were originally built to provide a 6-foot channel for paddle-wheel steamers. Crest boards were later added to deepen the channel for modern screw-wheel towboats and deeper draft barges. The United States Corps of Engineers regard lock and dams 8 and 9 as the weakest link in the whole navigation system.

Lock and dam No. 8 was constructed in 1903. Leaks in dam 8 recently became so bad that the engineers had to go in and face part of it on the upstream side with sheet steel piling. Another leak has developed which will require further sheet steel piling to face an additional 50 feet. Indications are that the river wall of lock 8 is undermined to such an extent that it is left standing on only the original piling.

Lock and dam No. 9 was constructed in 1902, a year ahead of No. 8. The river wall of lock 9 is undermined from 3 to 4 feet, leaving it supported only by the original timber piling. This condition was recently discovered when the lock was unwatered for a complete inspection. At the same time it was found that the wood-sheet piling surrounding the river wall is in a stage of advanced deterioration and missing entirely in some sections. Under these conditions the lock wall is extremely unstable. A "breathing" movement of the wall can be observed when vessels or tows fall against the wall when entering or leaving the lock. It would probably cause loss of lives and serious property damage should the lock wall collapse with a vessel and tow in the chamber. Dam 9, which is of timber-crib construction has settled from two-tenths of a foot to as much as one-half foot over a 75-foot section. This settling took place in 1949 and 1950. The crest timbers have washed downstream. The old wood cribbing of the dam is in an advanced stage of deterioration and 40 to 50 percent of it is believed wasted away entirely.

Maintenance of locks and dams No. 8 and 9 and the channel in the shallow pools above them has cost an average of $180,111 annually over the last 7 years. (By comparison, maintenance of Tuscaloosa lock and dam since its completion in 1940 has averaged $22,748 annually.)

We fully recognize the authority and prerogative of this Congress and this committee to take whatever action it sees fit. But we should like to point out that there is precedence for what we are asking this committee to do, recognizing, of course, that the authority we are citing in no way binds this committee to either action nor a type of action to be taken. The general authority for the modernization of the Black Warrior, Warrior, and Tombigbee Waterway by the replacement or reconstruction of old structures is contained in section 6 of the River and Harbor Act of 1909, Public Law No. 317, approved March 3, 1909, which reads in part: " * * * *Provided*, That whenever, in the judgment of the Secretary of War, the condition of any of the aforesaid works is such that

its entire reconstruction is absolutely essential to its efficient and economical maintenance and operation as herein provided for, the reconstruction thereof may include such modifications in plan and location as may be necessary to provide adequate facilities for existing navigation: *Provided further*, That the modifications are necessary to make the reconstructed work conform to similar works previously authorized by Congress and forming a part of the same improvement, and that such modifications shall be considered and approved by the Board of Engineers for Rivers and Harbors and be recommended by the Chief of Engineers before the work of reconstruction is commenced: * * *."

We submit to this committee that these two locks and dams have served to the full extent of their usefulness. We cannot speak officially for the United States Corps of Engineers, but we believe it is also the corps' opinion that they have served to the full extent of their usefulness. Not only that, but these two structures have reached such a state of obsolescence and advanced deterioration that failure to replace them is jeopardizing the whole river system for navigation purposes.

We are in complete agreement with the desires and the plans to economize in Federal spending, but we fail to see how the failure by the Congress to protect a multi-million-dollar public investment that has already been made in a great natural asset represents economy. We believe it is better economy to protect that investment. The only realistic insurance against closure of the waterway is to begin work now to replace these two locks and dams.

The Corps of Engineers has reported dam 9 to be in such a deteriorated state that it is beyond repair except to patch it from time to time. The engineers do not consider it practical to rehabilitate lock 9 as this would entail complete replacement of the river wall and close the river to navigation for about a year. Such rehabilitation of locks and dams Nos. 8 and 9 would cost approximately $8,570,000 including maintenance over a period of 10 years. With rehabilitation we would still have lock chambers of a size built for packet boats and a channel only a little better than a packet boat channel.

Our primary purpose before this committee today is to reemphasize the concern which we understand from newspaper accounts has been officially expressed to the committee by Maj. Gen. Samuel D. Sturgis, Chief of the United States Corps of Engineers, and to make our own earnest plea to the committee that it reinsert in the 1954 budget sufficient funds to start work on the Warrior lock and dam as a replacement for locks and dams 8 and 9 on the Warrior-Tombigbee.

The plans and specifications for Warrior lock and dam are ready, thanks largely to this committee which recognized the seriousness of this situation and restored planning money to the 1953 budget. That planning money was appropriated. The plans are drawn for a dam sufficient in height to create a deep-water pool for 80 miles in the river and to provide a 22-foot lock lift in a 100-foot-wide by 600-foot-long lock chamber. Warrior lock and dam would be located in a 240-foot-wide cutoff canal across a large bend in the river and when completed would eliminate approximately 5 miles of river travel. Estimated cost of construction is approximately $19 million, with about 3 years required to build. It is noteworthy and we want to call your attention to the fact that in planning the Warrior lock and dam a site was found which is especiallly adaptable so that construction can be accomplished with only minor interruption of navigation.

We believe and we hope you will agree that it is better economy to start construction of Warrior lock and dam immediately rather than impose an unjustified risk of closing the entire waterway to navigation and thereby rendering ineffective and unproductive the investment already made in a great natural asset which has adequately justified the investment over a long period of time by the use to which it has been put and the promise of additional use to be made of it in the years ahead. Not only is the investment of the people of this country in the navigation facilities being jeopardized, but the investment of 20 towboat and barge operators as well as the investment of companies with terminal facilities also being jeopardized.

The budget originally proposed for 1954 civil works of the Corps of Engineers carried $1,900,000 to start construction of Warrior lock and dam. That money has now been completely eliminated from the revised budget. We cannot believe the facts as presented here today and which can be even more fully developed were known completely to those responsible for the elimination of these funds.

We therefore respectfully and urgently request the members of this committee to reconsider the Warrior lock and dam on the Warrior-Tombigbee water-

way in Alabama and restore to the 1954 civil works budget of the Corps of Engineers adequate funds to allow a year's work to proceed immediately on the structure.

Mr. DEBARDELEBEN. Mr. Chairman, Mr. W. I. McElroy, superintendent in charge of operations of the Warrior-Gulf Navigation Co. is here. They are the largest carriers on the river. Mr. McElroy has a statement that he would like to put into the record.

Senator MUNDT. Yes, it has been submitted to me. It will be inserted in the record.

(The statement referred to follows:)

STATEMENT IN CONNECTION WITH PROPOSED CONSTRUCTION OF WARRIOR LOCK AND DAM ON THE WARRIOR RIVER TO REPLACE OBSOLETE LOCK AND DAM NOS. 8 AND 9

I am W. I. McElroy, superintendent of operations of the Warrior & Gulf Navigation Co., Chickasaw, Ala. This company is a substantial operator on the Warrior-Tombigbee River System engaged principally in the transportation of finished steel products such as plates, sheets, tinplate, cotton ties, structural steel, etc. from the Birmingham district to ports on the Gulf Intracoastal Waterway from Mobile, Ala. to Brownsville, Tex. Upstream commodities consist of such raw materials used in steel manufacturing at Birmingham, as sulfur, iron ore, manganese ore, and petroleum products. Our fleet consists of 6 1,200 horsepower modern diesel-driven towboats and 88 steel barges.

We have operated on this river system for over 25 years and during this period of time we have witnessed the gradual deterioration of the entire river, including the locks and dams. In recent years we have been harassed by complete stoppages of our operations to repair leaks in the old wornout locks and dams (see exhibit A and B) and because of severe shoaling in the shallow pools above some of the locks. Some of these stoppages were for a duration of 10 days, and we have been forced during low-water seasons to lighten our barges to enable us to keep our tows moving through the shallow channel.

We were, therefore, most gratified when Congress recognized the seriousness of the situation on this river by appropriating funds for the construction of a modern lock and dam at Demopolis, Ala., to replace four of the small obsolete packet-boat type of locks and antiquated wooden dams above this location. The next most important step to insure continued operations on this river system is the construction of the Warrior lock and dam at approximately mile 273 to replace existing locks 8 and 9, which are over 50 years old. We were, therefore, completely dismayed to learn that the request for funds to commence construction of this lock have not been included in the budget recently submitted to Congress.

In view of this company's investment in floating equipment and terminals (see exhibits C, D, E, and F) we are greatly concerned with the deteriorated condition of some of the locks and dams, which may through failure result in a catastrophe to our company. We decided it was definitely in our interest to determine from the United States Corps of Engineers the actual physical condition of these locks and dams, and the information set forth below is largely from this source. We understand from the Corps that the weakest link in the chain is the present lock and dam No. 9 and the next in order is lock No. 8, both of which were built 50 years ago. It follows that the construction of the new Warrior lock and dam is urgently needed to avoid a structural failure at either of these locks. As stated above these 2 locks are over 50 years old, lock 8 having been constructed in 1903 and lock 9 in 1902. Both are of masonry construction with timber-crib approaches and wooden dams. The chambers are 52 feet by 280 feet, with wooden floors. These locks were designed to provide a channel of 6 feet to accommodate the shallow-draft paddle-wheel steamers of that day. Later, crest boards were added to provide a 9-foot channel as commerce increased and deeper screw-wheel vessels and larger barges began to ply the river. The present lift of lock 8 is 10 feet and of lock 9 11 feet.

The dam at lock 8 was recently repaired by partial facing with sheet-steel piling on the upstream side to repair leaks. Another leak has developed which will require further sheet steel pile facing to the extent of approximately 50 feet. It is believed that the river wall of the lock at this dam is undermined leaving the walls standing on the original piling. This is the condition of lock 9 which was determined some time ago by actually unwatering the lock chamber for

inspection. The dam and lock chamber could be repaired but only at very high cost and by closure of the river to traffic for a period of 4 months. However, even with such repairs we would still be encumbered with an exceedingly small lock chamber which as previously stated was originally for a packet-boat operation.

The present river wall at lock 9 is undermined from 3 to 4 feet, leaving it supported only on the original timber piling. The wood sheet piling surrounding the river wall is in poor condition and missing entirely in some sections. The wall of the lock under these conditions is by no means stable, which has been proven by a breathing movement when vessels or tows fall against the wall upon entering or leaving the lock. Should this wall collapse while a vessel and tow is in the lock chamber we would anticipate a major disaster. The old timber-crib dam at lock 9 settled 0.2 to 0.5 feet over a 75-foot section during a high-water stage in 1949–50. The crest timbers have moved downstream and the original crib section of the dam is badly damaged. In general the wood cribbing of the dam is from 33 to 50 percent wasted away due to deterioration.

The cost of operating the Tuscaloosa Lock and Dam, which was completed and placed in operation in 1940 averages $22,748 per year, whereas the cost of maintenance of locks 8 and 9 over the past 7 years has averaged $180,111 annually. This figure includes maintenance of the shallow channels in the lock 8 and 9 pools of $124,210 anually. Construction of the Warrior Lock and Dam will eliminate channel maintenance for many years to come.

According to the Corps of Engineers report the dam at lock 9 has deteriorated beyond repair other than to patch it from time to time to keep the waterway open. Likewise it is not considered practical to rehabilitate the lock as this would require complete replacement of the river wall and close the river to navigation for approximately 1 year. To rehabilitate the structures at locks 8 and 9 the corps estimates an expenditure of $8,570,000. This expenditure would contemplate the providing of structures in kind good for only 10 years of added existence. Again we would like to bring to your attention the fact that the rehabilitated structures would still remain, in view of their packet-boat size, an obstruction to efficient operation of modern tows. Further, it should be understood that the operating cost of the two locks would be excessive as compared with a single modern structure. In addition, a new structure would provide a deeper and wider channel and reduce considerably channel maintenance cost.

Construction of the Warrior lock and dam together with completion of the Demopolis lock and dam, now under construction, would accomplish modernization of a 129-mile bottleneck that now exists in this river system.

In spite of the handicaps and the threat of failure to one of the river structures which would terminate operations on the river, the growth of tonnage in recent years has been astounding. As an example, this company commenced operations in 1928 and from this time on to 1949 the greatest volume of freight handled in any single year was 422,000 tons. During the first 4 months of this year we handled 311,000 tons, and there is every reason to believe that without any unforeseen difficulties we will handle during 1953 more than 900,000 tons of commerce.

The proposed Warrior lock and dam is not a new project. It is definitely a project to take the place of two existing structures which are ready to collapse. Certainly in eliminating this project from the budget these facts could not have been known. I assure you that the condition of theses two locks and dams warrant your very serious consideration. Replacement of these old dilapidated structures obviously cannot be made overnight, and unless steps are taken very soon to correct this situation, disaster will follow just as surely as night follows day. If this river is closed to traffic a serious problem will be created to move, by other means of transportation, the tonnage that our company alone is presently handling.

Practically all of our tonnage is made up of steel, or raw materials for steel manufacturing, and thus it should be clear that our business is closely allied with the defense program. Last year this company handled approximately 235,000 tons of foreign iron ore which moved from Mobile to the Birmingham district. Anticipated movement for this year will approximate 450,000 tons. The transfer of this ore is made from ocean vessels to barges and storage at an ore dock which has no rail connections, and of necessity is tied in with the barge operation. Cessation of all operations on the waterway would indeed have a far reaching effect on the economy of the steel-producing facilities in the Birmingham territory.

(Pictures filed with committee.)

GENERAL STATEMENT

Mr. DE BARDELEBEN. Mr. McElroy is perhaps more familiar than any single man with the actual condition of these facilities and, if the chairman has any questions, he will be glad to answer them.

Senator MUNDT. The only question I have that would be helpful to me would be whether or not you have a map that would show the location of this whole project.

Mr. DEBARDELEBEN. I assume that the engineers have a map.

General CHORPENING. I do not think that we have such a map here, Senator.

Senator HILL. Would you bring a map up so that the chairman could see it at some other meeting?

Senator SPARKMAN. Mr. DeBardeleben has one here.

Mr. DEBARDELEBEN. This is the whole system, Mr. Chairman.

AMOUNT REQUESTED

Senator HILL. We are now asking for $1,900,000 to start. The proposition is, as you can see from these pictures, that the existing dam is liable to wash out at any time and, if it does wash out, the whole system is out.

Senator SPARKMAN. The bottom of this lock wall more or less swings and actually moves out.

Senator HILL. I think Mr. DeBardeleben used the expression, "freezing."

Mr. DEBARDELEBEN. That is right.

Senator HILL. I thought it was a good way to express it.

Senator MUNDT. Thank you very much. Does that conclude your statement?

Senator HILL. Mr. DeBardeleben, you have nothing else, do you?

Mr. DEBARDELEBEN. No, sir.

HAVRE-MONTANA FLOOD CONTROL

STATEMENT OF E. W. RISING, STATE WATER CONSERVATION BOARD, STATE OF MONTANA

GENERAL STATEMENT

Mr. RISING. May I present the map first. This project embraces the protection against floods from Bull Hook Creek. The channel is capable of carrying about 200 cubic feet, and we have had floods up to 2,000.

Senator MUNDT. You may proceed with your statement and I will have the map before me.

Mr. RISING. My name is E. W. Rising. I am the representative of the State Water Conservation Board of Montana. In appearing today I also represent the Havre Chamber of Commerce in support of the item of $790,000, which appears in both the January and April budgets.

Havre, a city of 9,000 people in north central Montana, is situated at the junction of Bull Hook Creek and Milk River. Havre is an important transportation center with lines of the Great Northern Railway running south, east and west from the city. Havre is also an important distribution point for a large trade area.

FLOOD DAMAGE

Floods causing severe damage to Havre have occurred frequently since 1916, and, as the population of the city increased, so has the annual flood damage increased. Some floods have been caused by Bull Hook Creek, while others are caused by Milk River.

The most damaging flood in the history of Havre from Bull Hook Creek occurred in June 1938, following a cloudburst, and the loss sustained at the time was estimated to be $360,000. Havre's population then was only about 6,000, and, since that time, the city has expanded rapidly.

The largest and most damaging Milk River flood of record at Havre occurred in April 1952 when about 300 residences and business places north of the railroad tracks were flooded, and nearly 1,000 people were driven from their homes. The loss sustained as the result of this flood is estimated to have been nearly half a million dollars.

Less disastrous floods than these two have occurred frequently, particularly from Bull Hook Creek where such ordinary conditions as a sudden thaw or a heavy rain cause overflow of the stream's constricted channel through the city.

A Federal project for Havre was authorized by the Flood Control Act of 1944. In July 1952 Federal funds, in the amount of $350,000, were appropriated by Congress for initiation of construction of the Bull Hook unit of this project.

THE BULL HOOK UNIT

This unit will consist of two earth-fill dams south of the city—one across Scott Coulee, and the other across Bull Hook Creek—an interconnecting channel between the reservoirs formed by these dams, and a spillway diversion channel system to serve the combined reservoirs. In operation, the water from floods will be stored safely in the Scott Coulee and Bull Hook Reservoirs until they drain away into Milk River by way of the diversion channel system which skirts the east part of the city. Floods of spillway size, which would exceed the capacity of the reservoirs, will be safely accommodated by the spillway channel.

MILK RIVER FLOODS

Protection from Milk River floods will be provided by the construction of approximately 2½ miles of levee on the south bank of Milk River.

When both the Bull Hook unit and the Milk River levees are completed, Havre will be secure against damages from future floods.

The estimated total Federal cost of the Havre flood-control project, including both the Bull Hook and Milk River units is $2,137,000. The city of Havre estimates that the cost of lands, easements, and relocations, the furnishings of which are its responsibility, will be about $125,000. The money to finance Havre's part in the project is now in the city treasury (except that already spent for purchase of right-of-way) having recently been raised by the sale of bonds in connection with a special improvement district for flood control. Purchaseable lands have already been acquired, and, in order to hasten the acquisition of other lands which are not readily obtainable by direct purchase, condemnation suits have been instituted.

Senator MUNDT. What did you give as the total cost to the Federal Government?

Mr. RISING. $2,137,000.

Senator MUNDT. How much has actually been spent?

PRIOR APPROPRIATION

Mr. RISING. We have $350,000 appropriated last year and, after the new administration came in, they froze the funds, so I think that nearly all the money is still available. The engineers would have to say how much they have spent. That $2,137,000 takes in both the Bull Hook Creek and the levee. We are principally concerned with the Bull Hook which cost about one and one-fourth million dollars.

Havre, having sold its issue of $125,000, bonds, has furnished assurance to the Government that it will satisfy all requirements of cooperation in the construction, operation, and maintenance of the project.

AMOUNT REQUESTED

We, therefore, urge that Congress appropriate funds in the amount of $790,000, as included in the President's budget (both budgets) for the next fiscal year in order that construction may continue on an economical basis, thus assuring protection of the city of Havre from damaging floods.

Mr. Chairman, I also submit, for the record, a letter addressed to you by Mayor Oval S. Hatler of the city of Havre, in which you are advised that the city is not alone prepared, but in going forward with its part of the responsibility for construction of the project.

Senator MUNDT. The letter may be made part of the record.

(The letter referred to follows:)

CITY OF HAVRE,
Hill County, Mont., April 23, 1953.

DEAR MR. CHAIRMAN: Prior to receiving word from the Corps of Engineers, Fort Peck, Mont., stating that all Government projects were to be reviewed in Washington, D. C., and that our Bull Hook flood-control project was included, the city of Havre was well along in making the necessary arrangements and commitments required of them as their share of the project.

City of Havre bonds in the amount of $125,000, to cover the city's share of the project, were sold on February 16, 1953. Preliminary surveying work was contracted for and completed prior to the word from Fort Peck. Leases were purchased, and the necessary land was already purchased or options for purchasing were completed. On other land required for the project, condemnation proceedings were begun just waiting for the legally appointed time for completion.

To date $24,492.13 has been expended for buying up land, leases, printing, supplies, and professional services.

Very truly yours,

OVAL S. HATLER, *Mayor.*

Mr. RISING. I certainly thank you, Mr. Chairman, and I will be glad to answer any questions or point out anything on the map.

Senator MUNDT. I think that your statement is very clear, Mr. Rising, and with your map and this statement, I am sure that we have all the information necessary for the study of the project.

The committee will recess until 2 o'clock this afternoon.

(Whereupon, at 12:10 p. m., May 25, 1953, the committee recessed, to reconvene at 2 p. m., same day.)

AFTERNOON SESSION

Senator YOUNG. The subcommittee will come to order.

Senator Dirksen, it is a pleasure to have you make any statement you wish.

CONSTRUCTION OF BRIDGE ACROSS ILLINOIS RIVER

STATEMENT OF HON. EVERETT McKINLEY DIRKSEN, A UNITED STATES SENATOR FROM THE STATE OF ILLINOIS

BASIS OF REQUEST

Senator DIRKSEN. Mr. Chairman, it is a pleasure to sit on the other side of the table for a change.

Senator YOUNG. You have been on this side for many years.

Senator DIRKSEN. Mr. Chairman, I wanted to testify in behalf of a project that does not carry a budget estimate, it relates to the construction of a bridge, a railroad bridge across the Illinois River at a place called Valley City, and the basis for the request is something like this: The Illinois River runs northeast and southwest through a good portion of the State, and at Valley City somewhat below Beardstown and above St. Louis there are 2 bridges that belong to the Wabash Railroad, 1 located at the village of Meredosia and the other at the village of Valley City.

When those bridges were built, they were wooden bridges, Mr. Chairman, and they were built long ago, and the horizontal aperture was such that for the width of modern tows that now go up and down the Illinois River, there is just not room enough. Since 1951 I am advised that on 85 different occasions either steamers or long tows have crashed into the bridge and knocked some of the piling out of line so that really it constitutes a danger. I think the last time that the bridge was struck by a towboat, all traffic was suspended, both river and rail, for a period of 17 or 18 hours.

INADEQUACY OF PRESENT STRUCTURES

This is a rather busy freight railroad running from Illinois into Missouri. It is just one of those things that has developed over a long period of time, and I am not unfamiliar with these rather narrow bridges because I was a drainage contractor on the Illinois River for many years, and I knew the difficulty of getting a dredging rig from, let us say, 50 or 60 feet in the beam through a good many of these openings without whaling into piling and one thing or another and fracturing some of these bridges. I have done it myself.

Now these two wooden bridges are located at the points I have mentioned. It finally got so dangerous that Congress took account of it under the so-called Truman-Hobbs Act and the Wabash Railroad through its engineers was here, Mr. Hedley, and they finally contrived an arrangement with the Army engineers. I think the overall estimate for a new bridge to replace these 2 old bridges has been set at $4 million. I do not know whether that is the 1951 cost or later.

FEDERAL SHARE OF COST

The Federal share, according to the formula recited in the Truman-Hobbs Act, would be $2.5 million. That means that the Wabash Railroad would pay $1.5 million, and the Federal Government would pay $2.5 million. Now in the submission by the Corps of Army Engineers they said this was a project of superior worth, but no money has been included in the appropriation bill for civil functions.

So the representation I am making to the committee now is that because of the imperative necessity for some action on this thing that some money be included in the bill. It need only be starting money, but at least the project ought to be started.

Senator YOUNG. Are you speaking of construction money?

Senator DIRKSEN. Construction money; that is right.

Senator ELLENDER. Is that for the building of the bridges or widening of the bridges?

Senator DIRKSEN. No; the two old bridges are to be replaced and a new bridge is to be built.

Senator ELLENDER. Yes.

Senator DIRKSEN. Of course, the width of the drawspan would be determined by whatever the Army engineers say it should be in the light of modern shipping conditions.

Senator ELLENDER. Then you are asking for money to build?

Senator DIRKSEN. Build one bridge.

Senator ELLENDER. In place of two wooden ones?

Senator DIRKSEN. That is right. We would build one bridge under the provisions of the Truman-Hobbs Act to cost $4 million, $2.5 million as the Federal share, and $1.5 million as the railroad share, which they are ready to put up and then to dismantle the 2 old bridges so that you have 1 safe bridge with enough horizontal distance to admit these wide tows, particularly coal tows.

Senator ELLENDER. Has that been planned yet?

Senator DIRKSEN. Evidently so. I am judging now from rather voluminous testimony that was given to the House committee by Mr. Hedley, of the Wabash Railroad Co. They ventilated it before the House committee at considerable length.

Senator ELLENDER. It might be well to get the engineers to tell us whether or not they are ready for construction funds.

Senator DIRKSEN. I think if they are here I would like to hear a little testimony on the subject and find out what this story is because I have had ever so many calls from interested parties out there who believe this work ought to be gotten under way.

READY TO PROCEED ON CONSTRUCTION

Colonel MILNE. Under the procedure of the Truman-Hobbs Act, we carry our work to the point where we agree on the type of bridge that should be built and agree on the appropriation, national cost, that should be borne by the Government and the railroad company. Now the actual construction and the actual planning is done by the railroad company, but I think your question, Senator Ellender, was whether or not if money were appropriated could construction go forward.

Senator ELLENDER. That is what I had in mind.

Colonel MILNE. It could go forward, sir.

Senator ELLENDER. It could go forward?

Colonel MILNE. Yes.

Senator YOUNG. An agreement has been entered into between the railroad and the Federal Government?

Colonel MILNE. Yes, sir.

Senator ELLENDER. Colonel, could you tell us how much could be spent on this bridge by the Federal Government?

Colonel MILNE. Under the Truman-Hobbs Act, sir, all of the money necessary to construct the bridge; that is, construct the Federal Government's share, must be appropriated.

Senator ELLENDER. I see. De we know how much that is?

Colonel MILNE. Approximately $2.5 million.

Senator YOUNG. How much would you need this year to start it?

Colonel MILNE. We could not spend all of that money, but under the law passed by Congress all of the money should be appropriated before any work can start.

Senator DIRKSEN. I think that is pretty clear, Mr. Chairman, as to just what the situation is, what the legislative and authorization situation is, so it is a question now of money in order to get it under way.

I might only add that in view of the number of collisions with the bridge and with cluster piling and the safeguarding piling that is usually put at the head of a bridge and particularly the piers that mark the drawspan, if this continues, why, of course damages are going to run up and finally one day the bridge is going to fall in the river.

Then the United States Army engineers must come from St. Louis or Peoria and bring their cranes and rigs along and fish out a span, but you will not have this railroad service, and you will not have river service, and of course river service will move to the peak because this is the ideal season for moving cement, coal, automobiles in open barges, grain, gravel, sand, and there has been a very considerable growth of river commerce within the last few years.

HAZARDS

So the structures have to be safe. These are old structures, and something should have been done long ago: it just was not, and they have suffered this condition. But the collisions will increase.

There is a wide area of water there, and you get rather substantial wave action so that often you simply cannot hold these long tows, try as you will and no matter what the power is in your towboat. I have seen that happen, and I have had that experience too many times as a contractor, so I know what the hazards are and what the potential expense might be unless this is corrected and remedial action is set in motion without delay.

CHANNEL WIDENING PROJECT

Now, Mr. Chairman, I have one other project here that I could just as well testify on. I do not suppose you are familiar with the Calumet River in the lower end of Chicago, and I do not think I will weary you with a lot of prints and one thing and another. But we have a

river known as the Calumet River, which connects up with the Calumet-Sag Canal and Lake Michigan. It is in the river at the lower end that your ore boats and boats that carry aggregate and heavy rough tonnages come for unloading.

There are unloading docks on each side of the river, and on one side there are also repair docks. Now what happens is this: When vessels are made tight to either side and sometimes they jut out at an angle and sometimes they jut out into the middle of the Calumet River, and what happens is this: Another vessel will come in from the lake; it cannot negotiate the passage when you have these vessels on both sides of the river at these unloading and repairing docks. So what it will do is simply drop anchor or make fast to a snubbing post, and there it lays until the loading and unloading of the other vessels has been consummated.

Now when you are paying a crew and when you are idle there with lay time for a good while, obviously you run up expense, and when you run up expense it simply has to be attached to whatever the cargo is that you carry, whether it is iron ore, coal, or whatever it is.

AUTHORIZATION

Now this thing was taken account of a good long time ago in the form of a project called widening channel and reducing sharp bends on the west bank of the Calumet River between 100th Street and what is known as slip or entry No. 2. It was authorized as far back as August 30, 1935, and it is listed on page 1814 of the report on improvement of rivers and harbors in the Chicago, Ill., district through the office of the Chief of Engineers in 1952.

ESTIMATED COST

Now the budget status, Mr. Chairman, is this: There was a request of the budget for 1954 by the Corps of Engineers, but finally nothing was included in either the original or the revised budget for this purpose. Now it does not take a great deal of money. The Corps of Engineers estimates the cost of this improvement at $110,000. The cost in idle time, crew pay, and everything else that goes with it would more than offset that, I think, in any 3-month period in the year.

It has been represented to me that losses because of the fact that this channel in the Calumet River is so narrow will run into millions a year. If they will widen it, of course the people who are carrying on a service there that they call rail to water and water to rail service where you take out of barges and boats and put it alongside on the dock and then pick it up with rail is such that they are willing out of their own funds to build a $500,000 improved dock, but there is no need for them to do it unless this channel is wide enough.

Now we ought to make a start on it, and since the amount is only $110,000, if we can evidence some faith that this thing will be started, why, I am confident that the people who are interested in private docks will not only build the dock, but the chances are that other docks will be built down in that area also, because that is the great bulk shipment area for Chicago.

Senator ELLENDER. Is $110,000 the entire cost?

Senator DIRKSEN. That is the entire cost.

Senator ELLENDER. There would be no sense in appropriating less than that if it costs only that.

NO LAND COST

Senator DIRKSEN. As a matter of fact, here is what the people who are operating rail to water transfer will do if this $100,000 is spent. First they will give a perpetual easement in the land that is necessary so that you will not have to buy any land, and that is valued at $66,000, but they will do that out of their pocket. Then they will build a new dock wall, which I estimate to cost $550,000. Then they will enlarge their own facilities to provide 2 loading towers so that 2 vessels may be serviced at the same time, and this will cost them $3 million.

In addition they will clear the channel of obstruction, and they will practically double their own capacity while they are doing it. So as the matter stands now, because of this narrow spot just above a bend which costs only $110,000 to repair, you have losses accumulating year after year. If you will spend the money, they will spend a little over $3.5 million of their own money to put in great improvements which will facilitate rail-water shipment out of that area.

Now I can submit other detail here about tonnages that are involved, particularly by the utility users and so forth, but I do not know that that is necessary. I think that will give you the picture of what exists at Calumet River. Now I would like to hear from anybody in the Corps of Army Engineers with respect to this and whether or not that statement is not consonant with what they have in their own files.

STATEMENT OF CORPS OF ENGINEERS

Senator YOUNG. Would you like to make a statement on that project, Colonel?

Colonel MILNE. What Senator Dirksen has said about this project is correct. The Corps of Engineers estimates the cost at just over $108,000 to complete that particular segment of work along the channel which will widen the channel and permit this one large organization to make complete and effective use of the facilities that they propose to build, and without such widening they cannot build.

Senator ELLENDER. What do you mean by one large organization?

Colonel MILNE. There might be some misunderstanding in the committee's mind. This particular section of the Calmet Harbor is just one of several that have been authorized by the Congress to do. The $108,000 will take care of work around in the vicinity of 110th Street. There are other areas further upstream on the Calumet-Sag which have been authorized for widening, but this is the one at the present time where the greatest need exists.

Senator YOUNG. I understand some industry representatives have appeared before the committee and presented figures as to tonnage.

TONNAGE HANDLED

Senator DIRKSEN. That is right. There is tremendous tonnage, and I have some figures here, Wisconsin Electric Power Co., 900,000 tons; Wisconsin Power & Light, 300,000 tons; Wisconsin Power Co., Green

Bay, 280,000 tons; Consumers Power of Muskegon, 480,000; and Rural Electrification Administration, 120,000.

This is really a very busy place. So when vessels come in and they simply have to dock or tie up or anchor until they can get through, you can imagine what the losses are where such tonnage is involved. One hundred and ten thousand dollars is a drop in the bucket not only compared to the losses but compared to the improvements that will be made by private capital in order to develop a better rail-water service. So I think, Mr. Chairman, that is about all I need say on the subject except probably to show the committee some prints here of the number of vessels that come in because this is almost as good as the harbor of New Orleans, with which I am reasonably familiar.

Senator ELLENDER. Not quite.

Senator DIRKSEN. I am sure New Orleans is bigger.

Senator YOUNG. Does that complete your statement?

Senator DIRKSEN. You can put those in the files, Mr. Chairman. I have completed my statement. I reemphasize to the committee the importance of that project because the damage will be a recurring thing, and as long as you get wave action and through a narrow aperture you are going to have damage to those bridges.

Senator YOUNG. Thank you very much.

Senator DIRKSEN. Thank you.

(The committee received the following letter from Mr. Leo M. Geissal supplementing his testimony of May 19.)

(See pp. 1498–1499)

RAIL TO WATER TRANSFER CORP.,
Chicago, 4, Ill., May 19, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee, Army Civil Functions,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: In my oral testimony before your committee on Tuesday afternoon, May 19, with reference to House Document 494, 72d Congress, 2d sess., dated August 30, 1935, authorizing the widening of the Calumet River, Chicago, Ill., I neglected to include in my presentation the fact that the $110,000 needed for dredging was originally included in the Chief of Army Engineers budget for the 1954 fiscal year, and as I understand it, was approved by the Director of the Budget.

Yours very truly,

LEO M. GEISSAL, *President.*

Senator YOUNG. Senator Murray?

BULL HOOK FLOOD-CONTROL PROJECT, MONTANA

STATEMENT OF HON. JAMES E. MURRAY, A UNITED STATES SENATOR FROM THE STATE OF MONTANA

GENERAL STATEMENT

Senator MURRAY. I am appearing this afternoon in support of an item in the civil functions appropriations bill for the construction of a flood-control project in the State of Montana. That project is known as the Bull Hook project and is located at the city of Havre, Mont.; the revised budget submitted to the Congress by the President provided $790,000 for this project which was authorized by the Flood Control Act approved December 22, 1944, in accordance with the recommendations of the Chief of Engineers.

I will not take this committee's time in presenting a detailed summary of the specifications of this project or the mechanics of how the project will operate, or go into any detail with reference to the damages that are suffered annually as a result of the conditions that this project is designed to overcome. Every year for a great many years they have been having floods there, and in 1952 they had a very serious damaging flood which would be averted if this project were carried through.

Mr. Rising has covered these matters that I have just mentioned in a statement which he has filed here, and I do not think it will be necessary for me to repeat.

Mr. Rising, I believe, apprised you of the extent to which the city of Havre has incurred binding legal obligations in attempting to fulfill those duties which have devolved upon it under the project authorization, namely the making of utility modifications and the purchasing and leasing of rights-of-way. I should like at this time to submit copies of telegrams I recently received relative to this project which set forth in some detail the position the Havre municipal government now finds itself in.

I will submit these telegrams for the record.

Senator YOUNG. That will be done.

(The telegrams referred to follow:)

HAVRE, MONT., *May 25, 1953.*

Hon. JAMES E. MURRAY,
Senate Office Building:

Vital to citizens of Havre that Bull Hook appropriation, which was deleted by House committee, be restored by Senate. Much money has already been spent on project by city of Havre and flood danger is ever present. Please use your best efforts at Senate committee hearing.

HAVRE CHAMBER OF COMMERCE,
R. M. LOCKWOOD, *President.*

HAVRE, MONT., *May 25, 1953.*

Hon. JAMES E. MURRAY,
Senate Office Building:

City of Havre deeply committed on bond-issue purchases in contemplation of Bull Hook approval. Urge all pressure in restoration of project in appropriations.

W. W. CASSEL,
Chairman, Bull Hook Committee.

HELENA, MONT., *May 25, 1953.*

Hon. JAMES E. MURRAY,
United States Senate:

Would appreciate your help in reviving Bull Hook flood-control project. This is vital to economy of Havre and northern Montana. Thanks for cooperation.

J. HUGO ARONSON,
Governor of Montana.

HAVRE, MONT., *May 25, 1953.*

Hon. JAMES E. MURRAY,
United States Senate Building:

Restoration of the Bull Hook flood-control matter so imperative to this city. City has incurred heavy obligation in land purchase because of former appropriation.

JIM HOLLAND.

HAVRE, MONT., *May 25, 1953.*

Hon. JAMES E. MURRAY,
United States Senator,
Senate Office Building:

Urge reconsideration of Havre, Mont., flood-control project. We have created special improvement district obligation, 4,000 property owners in city to pay for $125,000 bond issue to be paid over period of 20 years. Bonds have been sold and Havre has expended $70,000 of above figure in acquiring necessary right-of-way. All engineering and legal work required of city of Havre has been completed.

We face a continuing emergency. Thousands upon thousands of dollars have been lost by our people from floods. The threat continues, and as Havre grows, which it is doing, damages from each and every flood become larger and property loss more disastrous.

OVAL S. HATLER,
Mayor, City of Havre.

HAVRE, MONT., *May 25, 1953.*

Hon. JAMES E. MURRAY,
United States Senate:

On behalf of city of Havre and its residents, urge that Senate make restoration of item in civil functions bill for Bull Hook flood control. It has not only been badly needed for years but the increase in population makes it more necessary. The city has incurred the obligation of a bond issue and has spent large sums of purchase of right-of-way.

C. B. ELWELL,
District Judge.

Senator MURRAY. With your permission, I should also like to submit a report received from General Chorpening in May of last year which summarized the extent of damage sustained by the city of Havre and the citizens as a result of flooding of the Milk River and Bull Hook Creek.

Senator YOUNG. That will be made a part of the record.

(The letter referred to follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, May 1, 1952.

Hon. JAMES E. MURRAY,
United States Senate,
Washington, D. C.

DEAR SENATOR MURRAY: Reference is made to your request for information concerning the recent flood on the Milk River at Havre, Mont., and flood protection for that area. A report on this matter, based on data furnished by our district engineer at Fort Peck, has been received from the division engineer of our Missouri River division.

Warm temperatures during the latter part of March 1952 caused rapid melting of an above-normal snow cover in the upper reaches of the Milk River. The resulting high discharges combined at Havre to cause overbank flooding, beginning on March 31. Continued thawing temperatures kept the Milk River at flood stage in Havre until April 9. Hydrological studies have not yet been made to determine the effects of the Bureau of Reclamation Fresno Dam, located about 12 miles upstream from Havre, on the April 1952 Milk River flood. Maximum discharge over the Fresno Dam spillway reached an estimated 6,500 cubic feet per second on April 3. The principal sources of floodwaters contributing to flood conditions at Havre were Big Sandy Creek, which enters Milk River about 5 miles west of Havre, and the Fresno spillway discharges.

Flood fighting at Havre was initiated on March 30 by local interests with construction of an emergency levee on the south side of the river downstream from the bridge. The levee was about 1,000 feet long and between 3 and 4 feet high. The embankment was obtained by bulldozing adjacent soil into a windrow along the river bank. This emergency levee was overtopped and largely de-

stroyed during the early period of the flood. Flood rescue work was accomplished by volunteer workers as floodwaters rose in the Havre area and cars, trucks, and motorboats were used in evacuating residents and personal property. On April 1, 36 officers and enlisted me of the Havre unit of the Montana National Guard were activated and 46 Air Force personnel from the Great Falls Air Base were sent to aid the flood-stricken city. Both of these military units patrolled and guarded the flood areas. The Air Force personnel returned to their home station on April 7 and the National Guard was deactivated on April 11. It is estimated that 1,200 people were forced from their homes during the flood period. A preliminary estimate of the total Milk River flood damage in Havre is $400,000. Over 350 homes and about 110 business establishments sustained damage by flooding or seepage through basement walls and sewer backup. In addition, roads and streets were damaged, normal business was disrupted, and it was necessary to furnish emergency housing and subsistence for the displaced residents. All traffic into the large farming area north of Havre was interrupted for several days when the north bridge approach at Havre was flooded.

The floodwaters at Havre reached a maximum elevation of 2,479.6 feet above mean sea level at the bridge on April 8, which compares with an elevation of 2,482.7 for maximum water-surface elevation used in design of the authorized Milk River levee. The top of the levee, including an allowance of 3 feet for freeboard, at that point will be at elevation 2,485.7, or 6.3 feet above the recent flood. It is estimated that the proposed Milk River levee would have prevented about $250,000 of the total damage. This includes the flood damage sustained by about 150 homes and three businesses in the area south of the river and north of the railroad; 100 businesses south of the railroad which suffered damage from seepage into basements; and 100 homes south of the railroad which sustained damage from sewer backup. In addition, road and street damage south of the river would have been eliminated, disruption of normal business would have been minimized, and the cost of emergency housing and subsistence for displaced residents would have been considerably reduced. The above-mentioned overflow areas are shown on the enclosed aerial photograph.

The Flood Control Act approved December 22, 1944, authorized a flood-control project at Havre in accordance with the recommendations of the Chief of Engineers, as contained in Senate Document 103, 78th Congress. The plan of improvement provides for the protection of areas subject to flooding in the city by the Bull Hook unit and the Milk River unit. The Bull Hook unit consists of 2 earthen dams, 1 on Scott Coulee and 1 on Bull Hook Creek; a diversion channel to connect Scott Coulee and Bull Hook Creek; a spillway channel and other appurtenant works. The Milk River unit consists of a levee on the right bank of Milk River along the northern edge of the city.

The present estimated Federal cost of the authorized improvements is $2,075,000, and the estimated cost to local interests for utility modifications, lands, and damages is $160,000. Our district engineer has proceeded with the planning of the authorized work in order that construction may be promptly initiated when funds are made available for that purpose.

To date no funds have been appropriated by Congress for construction of the authorized project at Havre, nor is an item for that purpose included in the "Civil functions, Department of the Army" appropriation bill as passed by the House of Representatives on April 2, 1952, and now under consideration by the Senate.

The Corps of Engineers appreciates the desires of local interests to have the authorized project constructed at the earliest possible date. Accordingly, you may be assured that we will be prepared to initiate that construction as expeditously as practicable when funds are made available for that purpose.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, USA,
Assistant Chief of Engineers for Civil Works.

DAMAGE TO CITY

Senator MURRAY. This report, though it deals with last year's floods in the Bull Hook area, will give this committee an idea of the damage that has resulted every year for the past twenty-odd years from the floods which the Bull Hook project is designed to protect against.

This committee's records are replete with my testimony in support of the Bull Hook project, and it is unnecessary for me to needlessly dwell upon the many forceful arguments that have already been made in support of Bull Hook and with which all of you are familiar.

May I just say that the need for this project's construction is equally as great at this moment as it has ever been; year after year hundreds of thousands of dollars in damage are sustained by the city of Havre. The Corps of Engineers, after reviewing all its flood-control projects in accordance with the President's Executive order, has found Bull Hook to be one of the projects that should be completed as soon as possible.

That recommendation and numerous appeals I have received from the city officials in Havre compel me to urge most strongly your careful consideration of this item which is of such great importance to one of the largest cities in the State of Montana. I feel that this is one of the most meritorious requests ever to come before your committee.

Senator YOUNG. Does that complete your testimony?

Senator MURRAY. That completes my testimony.

I would like to have included in the record a letter from the Havre Chamber of Commerce which includes the views of the city attorney.

Senator YOUNG. That may be made a part of the record.

(The letter referred to follows:)

HAVRE, MONT., *March 1, 1953.*

Senator JAMES E. MURRAY,
Washington 25, D. C.:

The following statement from our city attorney is self-explanatory. This project is of utmost importance to us (copy of statement). Quote to whom it may concern. Re Havre, Mont., flood-protection project. The Havre, Mont., flood-protection project was authorized by the Flood Control Act approved December 22, 1944, Public Law 534, 78th Congress, 2d session. Section 3 of that act provides among other things that before any money is appropriated under the authority of this act the responsible local agency, in the instant case the city of Havre, must have given assurance satisfactory to the Secretary of War that it will (A) provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project, (B) hold and save the United States free from damages due to the construction works, and (C) maintain and operate all the works after completion in accordance with regulations prescribed by the Secretary of War.

In September of 1952, the city of Havre was notified by the office of the district engineer, Corps of Engineers, United States Army, Fort Peck district, that the sum of $350,000 had been appropriated for the fiscal year 1953 and the district engineer requested a meeting with the city of Havre officials. That meeting was immediately arranged; thereafter the Corps of Engineers reworked the final construction plans and a constant flow of engineering and legal information passed by and between the Fort Peck district engineers office and the city of Havre to the present date. The city of Havre had been told and since September been told, requested, and ordered to lose no time in complying with the above-mentioned section 3 of the Flood Control Act. Accordingly, in order to raise the necessary funds to finance the city of Havre's share of the cost of this project several community meetings were called involving city officials and chamber of commerce officials and other interested persons. From those meetings a definite program evolved and the city hired a consulting engineering firm from Great Falls, Mont., to make all necessary surveys in connection with the land-acquisition program. The city attorney was instructed to acquire the lands. The city of Havre created special improvement district No. 280, which embraces every lot within the corporate limits of the said city of Havre and floated a $125,000 bond issue, and accordingly advertised for bidders. The bids were received, the bonds were printed, and have been delivered. The city of Havre has 7 condemnation suits filed in court and in 1 instance it has completed negotiations for the outright purchase of 1 landowner's land, buildings, and all for the sum of $9,000.

This particular man, relying upon the good faith of the city of Havre, has sold and disposed of all of his personal belongings and has made arrangements to purchase a farm in the State of Oregon.

To date the city of Havre has spent several thousands of dollars having acted in good faith upon the instructions from the office of the district engineer Corps of Engineers of the United States Army, Fort Peck District. On February 26, 1953, the city of Havre received a letter from the office of the district engineer, Fort Peck District advising that he could not advertise for bids until some future date, that the status of the Havre, Mont. flood control project particularly the Bull Hook unit thereof, is currently uncertain pending the outcome of an examination by the Bureau of the Budget.

The city of Havre is placed in a rather unusual and most unfavorable predicament having acted in good faith and in strict adherence to the requests and orders of the district engineers office, has created the above mentioned special improvement district, has delivered the bonds upon which interest starts to run as of March 1, 1953. We are now told to hold everything. The city of Havre is placed in the position of either going ahead with the purchase of all lands, rights-of-ways, and easements involved and have the city of Havre taxpayers be taxed over a period of 20 years for a project that may never be constructed or we are placed in a position of stopping all land acquisition and subjecting ourselves to several damage suits as a result of actions already taken. It is almost impossible to adequately express the position the city of Havre has found itself in as a result of having acted in good faith in performing the requirements of section 3 of the Flood Control Act.

The flood situation in Havre, Mont., is a continuing emergency. It will not abate and has not abated for a period of many, many years, as witness the flood of last spring. Since the disastrous 1938 flood several hundred new homes have been constructed in the south portion of the city of Havre and it is the estimate of the engineers that if a similar flood occurred it would do approximately $2,- million damage.

Even on this date we are still being unofficially requested to proceed with our program but officially we are told it may never go through. It is most unfair, we believe, to the taxpayers of the city of Havre to be left in the predicament that we find ourselves in through absolutely no fault of our own but on the contrary having acted in extreme good faith all along. Yours very truly, L. W. Paul, city attorney, unquote.

JACK VICKERY,
Havre Chambers of Commerce.

Senator YOUNG. Thank you very much.
Senator MURRAY. Thank you, gentlemen.
Senator YOUNG. Senator Cooper!

KENTUCKY FLOOD-CONTROL PROJECTS

STATEMENT OF HON. JOHN SHERMAN COOPER, A UNITED STATES SENATOR FROM THE STATE OF KENTUCKY

Senator COOPER. Thank you, Mr. Chairman.

Senator YOUNG. Congressman John M. Robsion asked me to express his interest in the Louisville project because he could not be here.

Representative GOLDEN. Senator Earle Clements phoned a moment ago and said he was busy on the floor of the Senate, and he wished to express his concern on behalf of these three Kentucky projects.

ESTIMATED COST

Senator COOPER. Senator Young and members of the committee, I want to say that Congressman Golden is appearing with me on behalf of the several flood-control projects in Kentucky. The first one is at Louisville, Ky., on the Ohio River. This is a flood wall project. The total cost is estimated to be $27,438,000. The appropriations to date are $23,547,800. The project is 85 percent completed.

This year the budget finally submitted to the Congress by President Eisenhower asked for an appropriation of $1 million for fiscal year 1954. We just learned today that the House committee eliminated the entire amount so that there are no funds in the House bill, as will be submitted to the House.

I am not going into great detail on this project because I would like to file a more detailed statement. I would like to emphasize that it is 85 percent completed; that if this appropriation is not restored it will delay the completion of the project I am informed, at least 1 year.

PUMPING PLANTS

I am also informed that major construction contracts which would be adversely affected are four pumping plants. There are some streams that run at the edge of Louisville and through Louisville into the Ohio River and in flood season if these pumping plants are not completed, you might just as well, I understand, have not constructed the flood walls; the creeks would back up, and water could not get into the river.

The purpose of these pumping plants is to pump the water that backs up from those creeks and get it into the river.

Senator ELLENDER. Would the $1 million be sufficient to provide these 4 pumps, Senator?

Senator COOPER. I would like to defer to the advice of the engineers on this. Louisville is the largest city in our State. It is a great industrial city and becoming more and more a defense center and great industrial center for the border States and for the South. The Ohio River, as you all know, has a very bad flood record. I think you will remember that in 1937 one of the worst floods in the history of the country on the Ohio, and Louisville was very, very badly damaged.

Being as nearly complete as it is, it just seems to me and to everyone in the city of Louisville, the administration there, that it would be utter folly to delete this $1 million. It seems uneconomical and reckless to delete the amount.

If I am permitted, I would like to ask the engineers. I will say to you that I have not talked to them, and I would like to ask them what the effect of this deletion would be.

STATEMENT OF ENGINEERS

Senator YOUNG. General Chorpening?

General CHORPENING. This project is one, as indicated here, where we are getting close to completion. It is true that as of June 30 we will have a rather considerable unexpended balance. That is due to the fact that we were not able to make our contracts for this large pumping station until later in the fiscal year.

Senator ELLENDER. What is that in amount?

General CHORPENING. About $3 million. We expect to have it all obligated.

In revising our budget request in February, we concluded that we needed the additional million to carry out that contract for the pumping contract through fiscal 1954.

Senator ELLENDER. How many pumps would that purchase or assist in paying for where you have already ordered?

General CHORPENING. It would assist in paying for those already under contract.

Senator ELLENDER. I see.

Senator COOPER. Do I understand then, General, that the amount of money which was heretofore appropriated would not cover payment?

General CHORPENING. In our opinion the progress made on the continuing contracts will be such that we will not have sufficient funds to meet payments on that during the fiscal year.

Senator COOPER. Could you tell the committee what the value of these pumps is, how they affect the entire project?

INTERIOR PUMPING ESSENTIAL

General CHORPENING. On the flood wall and levee at Louisville, as is the case in many of our flood-control projects, in order to make it fully effective, in fact in order to make it workable, we must make provision for interior drainage to get the water out. So the pumping plants are a very essential and integral part of the flood protection for the city.

Senator YOUNG. The $1 million is for this interior pumping?

General CHORPENING. Yes, sir. The rest of the project is practically completed, but the large Bear Grass pumping plant, as I understand it.

Senator ELLENDER. To what extent would the facilities of the project be delayed if we fail to appropriate this $1 million?

General CHORPENING. One season in all probility, sir, that we could not complete the pumping station and have it in operation.

Senator ELLENDER. In other words, it would postpone it a year?

General CHORPENING. Yes, sir.

Senator COOPER. How much will have to be spent upon the pumping units?

General CHORPENING. I do not know that I have the exact figures here. It is a matter of how far will we be able to go under the contracts that we have in force.

Senator COOPER. But with this $1 million you can go right ahead with the contracts and installation of these pumps, which will make the whole system effective?

General CHORPENING. That is correct.

(Statement subsequently furnished by the Corps of Engineers:)

Subsequent to the above testimony the Corps of Engineers made a thorough review and analysis of the status of the Louisville, Ky., flood-control project. As a result of this review it appears that, on account of a large balance of available funds that will be carried over into next fiscal year, a satisfactory construction program can be carried on without the appropriation of additional funds in fiscal year 1954. The large unexpended balance results from very favorable bid prices on contracts thus far awarded, less costs for contingencies than anticipated and delays in initiation of construction of the large Bear Grass Creek pumping plant.

Senator COOPER. I would like to file a statement, Mr. Chairman.

Senator YOUNG. That may be done.

(The statement referred to follows:)

STATEMENT OF SENATOR JOHN SHERMAN COOPER FURNISHED SUBSEQUENT TO HEARINGS OF MAY 25, 1953

My support of the budgetary request for funds for the Louisville flood-wall project for fiscal year 1954 was based upon the professional opinions and factual testimony of the Corps of Engineers. Since the Corps of Engineers has withdrawn its previously expressed conclusions concerning the need for funds to advance the work on the Louisville flood-wall project, and have indicated that a satisfactory construction program can be carried on without the appropriation of additional funds in fiscal year 1954, I withdraw my request that funds be appropriated for fiscal year 1954 for the Louisville flood-wall project.

COVINGTON, KY., PROJECT

REVISED BUDGET

Senator COOPER. There is also an appropriation for Covington, Ky. The budget called for $1,475,000. It has been cut to $1 million. I understand that will postpone the completion of this project for 1 year. I am not in a position to say whether or not that will seriously retard the work. I would like to defer also to the statement of the engineers on that. If it is possible under the problems we face to restore that, of course I would be glad to see it restored.

Senator YOUNG. General Chorpening?

General CHORPENING. No, sir. As the chairman knows, we just have learned Saturday of what the action of the House has been. Now I am getting on all projects where there have been funds eliminated an up-to-date statement from the field as to exactly what the impact will be of that action, which I will be able to present no later than Wednesday, but until that time I would prefer not to make any statements on it.

Senator YOUNG. You will file that statement?

General CHORPENING. Yes, sir.

PINEVILLE AND BARBOURVILLE, KY., PROJECTS

Senator COOPER. There are two other projects which I will mention, but I would prefer that Congressman Golden in whose district these projects are located would speak as to those. They are the Pineville, Ky., and Barbourville, Ky., projects on the upper Cumberland River. These two proposed projects are located in the congressional district in which I live, the Eighth Congressional District of Kentucky.

The Cumberland River, as this committee knows, has been in the process of development and improvement for several years. The Cumberland River is broken by falls called Cumberland Falls. I think the Cumberland Falls are one of the highest falls in the United States. These two dams or flood-control projects are the first to be proposed and construction begun on the upper Cumberland River above this falls. We have had very bad floods there for many, many years and many towns there are always endangered by those floods, including these two towns.

ESTIMATED COST

The estimated cost of the Pineville project is $1,575,000. Total Federal appropriations to date have been $274,000. This year both the budget proposed by former President Truman and the President Eisenhower request for $590,000, the entire amount has been stricken by the House Appropriations Committee. Unless the work can go forward on these two, it just postpones the development of this upper Cumberland River. The towns there have taken steps to authorize bonds, and they have understood that as far as it is possible to understand if these appropriations are secured that this work would go forward.

I am very hopeful that this committee in making its consideration of their appropriations will leave in the budget some appropriations for the development of the upper Cumberland River.

Now if I can I would like with your permission to have Congressman Golden speak in regard to these projects.

Senator YOUNG. I would like to ask a question. There has been $249,000 appropriated for this project, General Chorpening. Has any construction work been started?

General CHORPENING. I think there has been a contract let for some work.

Representative GOLDEN. We spent it all but $180,000. We checked on it.

Senator YOUNG. Congressman Golden?

STATEMENT OF HON. JAMES S. GOLDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KENTUCKY

PINEVILLE, KY., FLOOD-CONTROL PROJECT

Representative GOLDEN. Mr. Chairman and gentlemen of the committee, we were in the appropriations bill last year and the last Congress appropriated $250,000 for construction of the Pineville flood-control project. We have been given planning money which had been spent and the plans had been completed. We were preparing to let the contractor spend the first $250,000 when the freeze order came along, and that stopped the letting of the contracts.

But in the second appraisal the Army engineers and the Secretary of the Army and the Budget Director all agreed that this was an essential project, it has been certified heretofore by the President as essential to the war effort, and they again allowed us for this year $590,000 to go ahead with the project in addition to the $250,000 that we got during the last session of Congress.

That freeze order was lifted something like 30 days ago as soon as the Budget Director again placed us in the budget, and they began to spend that money, and they spent what they had down there until they only have $180,000 left. The work started, and the city of Pineville was asked to and it did raise $590,000 out of a total Federal expenditure of $1.5 million.

Our proportionate share of this construction is rather heavy. We held an election; we voted bonds; the court of appeals, the last

court of resort in our State, approved the sale, and we have sold our bonds and have the money in the bank.

RIGHTS-OF-WAY PURCHASED

In addition to the Federal Government starting the work and spending some of the money, we have paid out $50,000 of our money in procuring rights-of-way.

Now I think our committee on the House side and I knew nothing about it until Saturday, as Senator Cooper has said, that they had cut out this year's appropriation of $590,000; they were under the mistaken idea I think that we could go forward and do something this year, but with $180,000 on a $2 million project, you know we cannot get anyhere. We have our money in the bank and we are paying interest on it, we bought our rights-of-way.

The Federal Government is ready to go ahead. The supplemental contract is to begin the 15th of June, and there is every reason in the world why we should be allowed the amount that the engineers and the Budget Director put in this bill of $590,000 in order that we may go ahead with this project in an orderly manner.

Now Pineville is in the middle of the bituminous coal field of southeast Kentucky. This flood wall goes around the railroad yards there and protects the railroad property in the yards where the great coal trains are made up that go into the war factories of this country. Lynch, Ky., that is, in Harlan County, has possibly the largest mine in the world, and all that coal is brought down into Pineville, made up into trains, and it is taken to the steel plants to make steel. You cannot have steel without bituminous coal.

In addition to that, this little town, the coal that goes into the electric plant just below Pineville between Barbourville and Pineville, we have a generating plant that creates a great deal of electricity. About 3 years ago when the Korean war started, they asked the Kentucky utility plant to increase its capacity to create electricity, and the request was for an increase of 50 percent. That is a company that is owned by private industry. They wanted to use that electricity over in the bomb plant at Oak Ridge, Tenn., just over the State line.

CURRENT FOR OAK RIDGE, TENN., ATOMIC ENERGY PLANT

This company increased its plant, and the coal that is burned in that plant comes through Pineville, Ky., where the streets are flooded and also through Barbourville, Ky., another little prospect where we are asking for about $75,000 to complete the planning. But the flood-control wall protects the highways over which the coal goes to get to this electric plant. Every day in the year we are furnishing there, just below Pineville, current for the atomic energy plant at Oak Ridge, Ten., and that is so important that this early spring the Government put on a helicopter that files over the line between Pineville and Oak Ridge or just below Pineville to patrol it to see that there is no interference. They have five high-tension wires that carry electricity every day into the bomb plant. If we are not allowed to go

ahead and if these floods cut off our electric plant and our bituminous coal supply to the war plants and to the steel plants of America, this country is going to be hurt.

FLOOD DAMAGE

Of course, the people there in Pineville and Barbourville are being hurt. We have floods most every year. In 1946 we had a flood that did enough damage to my little town to be the equivalent of the entire cost of this flood-control project. The same kind of damage was inflicted on Barbourville, Ky. We feel that this Government of ours ought to keep faith with us. These engineers here are familiar with it. They know whether they can do any good with $180,000 or whether it is necessary for us to have what they put in the budget, $590,000 for this project, and we need $75,000 to go ahead with the planning for Barbourville.

If we are privileged to, I would like for General Chorpening and Colonel Hiatt to tell you gentlemen the very serious situation that we are left in here.

Senator ELLENDER. Congressman, was the House made aware of the fact that these funds were frozen up to 30 days ago?

Representative GOLDEN. Yes, sir.

Senator ELLENDER. Notwithstanding that they cut you out?

Representative GOLDEN. Yes, sir; just an unprecedented thing, devastating to our people.

Senator ELLENDER. I agree with you.

Senator YOUNG. Did you want a statement from General Chorpening on this?

Representative GOLDEN. Yes.

STATEMENT OF ENGINEERS

General CHORPENING. I previously testified before the committee on our need for $590,000 for fiscal 1954. This is a very worthwhile project. As has been stated, it has a high benefit-cost ratio of 1.65 to 1. I want to get information from the field, but I think I am correct in saying that with the funds now in hand and with which we are proceeding there will be no useful unit produced on the project.

Without the additional funds we will have done something on which there will be no return at all.

Senator ELLENDER. General, could you tell us whether or not you would spend the $180,000, if that is all you get? You would not be able to do anything with it; it might be useless to spend it?

General CHORPENING. That is right. I said here earlier that it depends on whether or not we have actually entered into a contract for those units. As was stated here, we planned to advertise this around in February, as I recall it, and we were in a suspended status for a period of time while we were reviewing the budget. It was finally concluded to ask for funds in this project in the new budget submission, and at that time we were cleared to go ahead with this project.

Representative GOLDEN. We spent our money down there, gentlemen of the committee, and I ask you to give me the privilege of $25,000 for Barbourville. It is just the same as Pineville. They are both on the upper Cumberland River. These gentlemen can finish our planning

for Barbourville, and that is essential. These floods hit Barbourville and destroy it just the same as it is with Pineville. We think it is unreasonable when we have gone out and sold bonds and so forth to have it cut of this bill.

Senator ELLENDER. I notice that the revised budget did provide for $75,000 for this project.

Representative GOLDEN. For Barbourville, yes.

Senator ELLENDER. And that has been eliminated by the House?

General CHORPENING. That is right.

AMOUNT REQUESTED

Representative GOLDEN. We wanted $75,000; it has been cut out.

Senator ELLENDER. How much of the planning would this accomplish, General Chorpening?

General CHORPENING. If we got the $75,000, we expect to be in shape to ask for construction funds at such time as the criteria and fiscal picture permits us to do so.

Senator ELLENDER. Thank you.

Representative GOLDEN. Barbourville sold their bonds also. They have the money to go ahead.

Senator YOUNG. Senator Clements, we are delighted to have you with us.

STATEMENT OF HON. EARLE C. CLEMENTS, A UNITED STATES SENATOR FROM THE STATE OF KENTUCKY

PINEVILLE AND BARBOURVILLE PROJECTS

Senator CLEMENTS. Thank you, Mr. Chairman.

I would be happy to tell the committee that I have been through these hearings on both Pineville and Barbourville since their inception. I know something about the flood conditions that come to Pineville and that come to Barbourville. I saw them before it was my privilege to serve as Governor of our State. Of course some responsibility that you have as Governor in flood times brought me right close to the situation in both of those towns. I saw them from the ground; I saw them from the air.

These two little cities are in dire need of the things that they are asking for here at this time, and I desire to join them in their request. Both of these towns have floated their bonds, sold them, they are paying interest on them, and these appropriations are important for 2 reasons: (1) They do not waste those public funds and (2) they get the protection that these 2 flood projects will give to them.

I just believe that the two members of the committee that I see sitting here today will give sympathetic consideration in meeting the needs of these two communities.

COVINGTON AND LOUISVILLE PROJECTS

Senator ELLENDER. There was a Covington project and the Louisville project also, Senator.

Senator CLEMENTS. Mr. Chairman, I would not hesitate to join anything that my colleague here from Kentucky has said about the

Covington and Louisville flood wall, and the need to complete these projects this coming year.

Senator ELLENDER. That is one time you see eye to eye with him?

Senator CLEMENTS. As a matter of fact, we see eye to eye on a lot of things.

Senator COOPER. We do not disagree very often.

Senator CLEMENTS. When it comes to our State's interest politics stops at the border.

Louisville has had its greatest industrial development in the last few years, in fact the greatest it has had in its history. Presently there is under construction in Louisville the greatest single industrial development that it has ever had in the location of a General Electric plant that will work more than 16,000 people.

Senator COOPER. I think so.

Senator CLEMENTS. I would not suggest to you that I could speak for the engineers, but unless the engineers would tell this committee that this appropriation for Louisville was not essential for the completion of its flood-wall program, I certainly would urge you today to give favorable consideration to it because if there ever was a time when it was needed, it is now.

I would like to ask the engineers a question: What will this $1 million, General Chorpening, be needed for?

STATEMENT BY ENGINEERS

General CHORPENING. Senator, that $1 million for Louisville that is in the 1954 budget is needed to carry out a continuing contract that we either have made or expect to make soon for the completion of the pumping stations there, primarily Bear Grass pumping stations. That is a vital part of the flood-control works at Louisville without which the works that have been already constructed are simply not anywhere near as valuable as they will be with that.

(See p. 1884 for supplemental statement made by Corps of Engineers.)

Senator CLEMENTS. If this $1 million appropriation is not made this year, it will just delay the protection for the community for another 12 months?

General CHORPENING. That is correct.

Senator YOUNG. You gentlemen make a very good case. If you do not get the appropriation, it will not be your fault.

Senator CLEMENTS. I am hopeful that it will not be yours, nor that of the distinguished Senator from Louisiana, either.

Senator COOPER. Congressman Robsion is interested in this project, and he will file a statement for the record, Mr. Chairman.

Senator CLEMENTS. Mr. Chairman, I hope the committee will see to it that the necessary funds are allocated for the completion of the Covington flood wall. I believe General Chorpening will bear me out in this, that the completion of this flood wall is of vital importance to adequate flood protection for the people of Covington.

Senator YOUNG. Senator O'Mahoney?

GARRISON DAM, N. DAK.

STATEMENT OF HON. JOSEPH C. O'MAHONEY, A FORMER SENATOR FROM THE STATE OF WYOMING

GENERAL STATEMENT

Mr. O'MAHONEY. Thank you, Mr. Chairman.

Senator YOUNG. May I say for the record that it is a pleasure to have you appear before this committee because you are probably one of the best-posted men on all projects coming before the committee as a result of the many year's experience with it.

Mr. O'MAHONEY. Thank you very much.

I am appearing on behalf of citizens of North Dakota in the city of Williston and vicinity, testifying with respect to the operation of Garrison Dam. I am well aware, of course, that this project has been before the committee on more than one occasion since 1944 when it was first authorized. I think too little consideration, Mr. Chairman, has been given to the fact that the law which authorized the construction of the Garrison Dam, an effort was made by Congress to establish a definite policy by which the Corps of Engineers and the Bureau of Reclamation, and, indeed, the Congress of the United States should work in cooperation and harmony with the States and local communities in the development of the water resources of interstate streams.

COOPERATION BETWEEN CONSTRUCTION AGENCIES AND LOCAL AUTHORITIES

There had been many instances in the past in which the construction of these big projects had worked harmful results on local communities. There were instances in which projects were authorized and constructed without advance notice with respect to the plans and programs having been submitted to the water authorities of the States affected. So the Congress came to a definite conclusion that in the development of the waters of these great basins like the Missouri River Basin there should be complete cooperation between the construction agencies and the local authorities.

The object was to obtain the best results for all concerned with the least possible harmful results for those living in the areas in the States and in the communities, from which waters would rise, in which waters would be stored, in which great reservoirs would be built, and in which the people might be injured by being deprived of established and potential water uses.

AUTHORIZATION

I think it would be advisable, Mr. Chairman, for us to read into the record here the first section of the act of December 22, 1944, which authorized the construction of the Garrison Reservoir because it states in the clearest of language just what Congress had in mind and just

what the restrictions were upon the agencies building these great reservoirs.

After the enacting clause, the first section reads, and this is from the act "authorizing the construction of certain public works on rivers and harbors for flood control and other purposes," adopted December 22, 1944. I am quoting from volume 58 of the United States Statutes at Large at page 887.

In connection with the exercise of jurisdiction over the rivers of the Nation through the construction of works of improvement for navigation or flood control as herein authorized, it is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control as herein authorized to preserve and protect to the fullest possible extent established and potential uses for all purposes of the waters of the Nation's rivers; to facilitate the consideration of projects on the basis of comprehensive and coordinated development and to limit the authorization and construction of navigation works to those in which a substantial benefit to navigation will be realized therefrom and which can be operated consistently with appropriate and economic use of the waters of such rivers by other users.

SUBMISSION OF PLANS, PROPOSALS, AND REPORTS TO STATES

That is the preamble of section 1 of the act of December 22, 1944. It is followed by subparagraph (a) which it is unnecessary to read but which is a positive instruction to the engineers and to the Bureau of Reclamation, I say to the Bureau of Reclamation because the Secretary of the Interior is included within its provisions by subparagraph (c) of this act. It is an instruction to these agencies to submit all plans, proposals, or reports in advance to the proper authorities of the States.

O'MAHONEY-MILLIKIN AMENDMENT

Then because many of us who at that time represented the arid land States of the West of which North Dakota is one, States west of the 98th principal meridian where all of the residents know how valuable the locally developed water rights are to their daily living, an amendment was inserted known as the O'Mahoney-Millikin amendment. This amendment was drafted after prolonged conferences.

One of these conferences was held in Chicago. Persons interested in flood control, navigation, in reclamation and power, in agriculture, in stock raising were assembled and the suggestion was made in order to protect water rights upstream in the development of downstream projects. I offered the amendment from the floor on behalf of Senator Millikin and myself. It was adopted and is part of the law which governs every project included in the authorizations of that act of December 22, 1944 and all future projects. It reads as follows:

The use for navigation in connection with the operation and maintenance of such works herein authorized for construction—

and Garrison was herein authorized—

the use—

it says—

of waters arising in States lying wholly or partly west of the 98th meridian shall be only such use as does not conflict with any beneficial consumptive use present or future in States lying wholly or partly west of the 98th meridian and of such

waters for the domestic, municipal, stock water, irrigation, mining, or industrial purposes.

REASON FOR AMENDMENT

Language could not be clearer. The waters which fill the Garrison Dam are practically in their entirety waters that rise west of the 98th meridian and the beneficial uses with which this amendment deals are beneficial uses in the area west of the 98th meridian. Why was that amendment written? It was written for the express purpose of providing by law that neither the Bureau of Reclamation nor the Army engineers could take any water flowing down the sides of the mountains of Montana and Wyoming and other States, including North Dakota, rising anywhere in these Northwestern States, making it impossible that the Bureau could take that water and make it flow by the doors of the inhabitants, municipalities, and farmers living in those upper regions in order to fill the flood control and navigation works downstream.

In other words, we were saying by this statute that in constructing these vast interstate stream projects we shall not permit the construction agencies to take the water of upstream States for the exclusive benefit of downstream States. Why was I interested in it as a Senator from Wyoming? Because when the State of Wyoming was admitted into the Union, the act of Congress admitting it gave that State the ownership of the waters within it and authorized it to distribute that water for use by the farmers within the State. If this had not been written into the law, then big navigation works or flood-control works downstream could claim that all of that water, the property of the State of Wyoming, or in the case of North Dakota the property of the people of that State, would have to flow into the reservoir, and the reservoir would have to be filled before it could be used. Downstream uses would be given priority over established and substantial upstream uses.

SITUATION IN NORTH DAKOTA

Now, the situation that has developed in North Dakota is precisely that which this section was designed to protect against. The city of Williston, according to representations of the Army engineers and the justification submitted here, lies about 200 miles north of the Garrison Reservoir. Whether that is as the crow flies or as the rivr meanders, I do not know. The chairman will know better than I.

Senator YOUNG. As the river meanders.

Mr. O'MAHONEY. But there it lies 200 miles above the dam, and around that city of Williston there are presently operating irrigation projects on which farmers are living, on which they are growing crops, and on which they are making beneficial use of the waters of North Dakota. There are municipal uses and industrial uses long recognized and established and protected by this law.

LANDS BEING CONDEMNED

Now, despite the fact that this amendment is in the law, those lands are being condemned. They are not yet ready to be flooded, but already they are being condemned, and representatives of the Army engineers approach the landowners to give them their first

notice of condemnation. I do not know this of my own knowledge, it is hearsay so far as I am concerned, but Congressman Burdick, who expected to be here this afternoon but was unable because this bill is on the floor of the House, testified before the House committee that he knew of instances in which the representatives of the Army engineers came with their declaration of taking to his constituents, and then said to them, "Do you want to rent this property from Uncle Sam? He now owns it." It was to prevent such things that Congress wrote that provision into this law.

I have talked with the chairman of this committee, and I requested the clerk of the committee to secure certain information for me from the Army engineer. Mr. Harry E. Polk, editor of the Williston Herald, was over here, as the Senator knows, and I had the privilege of talking with General Potter, a most competent engineer and a fine gentleman who is in charge of this project. He was ready to cooperate in affording us full information with respect to this dam and the effect of the dam.

LETTER FROM GENERAL POTTER

I asked him if he would be good enough to have prepared or send on to us maps for the use of this committee which would show the lands to be taken at the 1,830 level, and the lands to be taken at the 1,850 level of the Garrison Dam. He sent these charts on; he sent this material on with a letter, which I would like to read into the record at this point, Mr. Chairman.

Senator YOUNG. Yes.

Mr. O'MAHONEY. It is addressed to the competent clerk of this committee, Mr. Kenneth J. Bousquet, Senate Committee on Appropriations. This is dated May 14.

DEAR MR. BOUSQUET: Reference is made to our conversation while I was in Washington concerning the Garrison project. At that time you requested maps showing the extent of the area between the 1,830 and 1,850 elevations and some indications of use made of this area in operations of the project. There is forwarded herewith as enclosure 1 a set of 15 sheets of the topographic map of the Garrison Reservoir area. The 1,830 elevation has been shown by a brown color, and the 1,850 elevation by blue. In this connection you will note that the Williston area and the Lewis and Clark irrigation projects will be protected by levees even though the contour lines in these areas have been colored. The frequency that the Garrison Reservoir may reach elevation 1,850 is indicated graphically on enclosure No. 2 which shows the pool elevations which would have been experienced during the 54-year hydrologic cycle from 1898 through 1951 with the presently planned manner of operation of the project. The specific operation study used as a source of data on this graph was for the estimated 1970 level of irrigation water usage in the Missouri Basin. However, elevations of Garrison Reservoir would fluctuate in generally the same pattern and elevation ranges for other stages of basin development.

There are also enclosed for your convenience copies of NBIAC statement on interest and responsibilities for Federal agencies in Missouri Basin flood control.

Sincerely yours,

W. E. POTTER,
Brigadier General, United States Army,
Division Engineer.

I want to reemphasize a couple of statements in this letter:

The specific operation study used as a source of the data on this graph was for the estimated 1970 level of irrigation water uses in the Missouri Basin.

Then we have this sentence:

The frequency that the Garrison Reservoir may reach elevation 1,850 is indicated graphically on enclosure 2 which shows the pool elevations which would

have been experienced during the 54-year hydrologic cycle from 1898 through 1951 with the presently planned manner of operation of the project.

I repeated that, Mr. Chairman, because I wanted to make it clear to the committee that this graph which I am now about to hand the chairman represents the water level during the period of 54 years under the conditions which would have existed had the dam been built to an elevation of 1,850 feet.

Senator ELLENDER. Fifty years ago?

Mr. O'MAHONEY. Fifty-four years.

CORPS OF ENGINEERS STATISTICS

Now, this is not my evidence, this is the evidence of the Corps of Engineers. In 1898, the first year, the 1,850 level had not been reached. In 1899 it was just reached. In 1900 below, 1901 below, 1902 below, 1903 below, 1904 below, 1905, 1906, 1907, and it is not until 1908, 10 years after the chart begins, that there was water enough in that stream had there been a Garrison Reservoir to reach the 1,850 level.

In 1910, 1911 down it went again. 1912, 1913, 1914, 1915, 1916 we come up to 1,850 again. In 1917, for the first time, we go above it but very slightly. 1918 below, 1920, 1921, 1922, 1923 all below, 1924 just equal, 1925 below. Then beginning with 1926 there again the water level did not reach the 1,850 mark. In 1927 it did. In 1928 it almost did.

Then from 1929 there was a steady decline of the amount of water flowing in this river down through 1941 when for the first time it had begun to rise after the drought. The record here presented by the engineers shows that in 1942 had the Garrison Dam been standing at its 1,850 level, the height of water would have been less than 1,800 feet.

In 1943 it went up, 1944 it went up, but from 1944 down to 1951 not once has the water reached anytime approaching the 1,850 level.

So, this document proves from the records of the Army engineers conclusively what Congressman Burdick testified before the House committee, what Mr. Davidson of Williston testified before the House committee, what Harry E. Polk, editor and publisher of the Williston Herald, testified: That in 40 years there never has been a flood in the city of Williston.

The Army engineers tell us that had there been a Garrison Dam there would not have been a flood in the city of Williston except perhaps in 3 years or 4 years at most out of the entire 54-year period. What is the necessity under a record of that kind to deprive the residents of Williams County and some of them in McKinzie County of the beneficial uses of the water protected and conserved to them by section 1 (b) of the act of December 22, 1944, which authorized the building of the Garrison Dam?

WATER-RESOURCES DEVELOPMENT IN COOPERATION WITH STATES

Now, Mr. President, when I was a member of the Senate, I was an advocate of the development of these vast water resources, and I still am. But, like other members of the Senate—all of them, to the best of my recollection—I believe that that development should be carried on in cooperation with the States and with the local residents of the States, and I do not want to see an occasion arise when pioneer

citizens of North Dakota, of Wyoming, Montana, or any other of those Western States should be deprived of the water resources that they had built up by their own energy and activity.

COMMITTEE REPORT

In the course of trying to bring about this cooperation between the States and the Federal Government, I had occasion to file, in the Senate, Senate Document 191, which listed the projects that the Bureau of Reclamation was going to develop after the Pick-Sloan plan had been agreed to, and then on November 21, 1944, just before this dam was authorized practically just a month before the authorization, I offered and had printed, as Senate Document 247, the report of the committee, consisting of Harry W. Bashore, Commissioner of Reclamation, and Maj. Gen. E. Reybold, Chief of Engineers of the United States Army, on the Missouri Basin development on the Missouri Basin plan.

On page 3 of this report we find that the capacity of the new Garrison Dam was set down at 17 million acre-feet. That was the capacity of this reservoir which was in the minds of Congress when that authorization was made. Now it is before us as a 23-million-acre-foot reservoir.

On page 3, which gives the features of Garrison and four other reservoirs—Oahe, Fort Randall, Big Bend, and Gavins Point—there is this sentence:

> The final storage capacity to be selected for the above reservoirs will be jointly agreed upon after more detailed plans and cost estimates have been made.

This sentence is not definite. It merely said that perhaps in the final construction the capacity might be more or less. It was not definitely stated; but, whatever it was to be, it was to be agreed upon jointly. The only thing resembling a joint agreement between the Bureau of Reclamation and the Army engineers is a meeting of the Interagency Committee of the Federal Committees which operate here, but that was not the sort of report that we had in mind when this was authorized, and when this act was passed, calling upon the agencies to submit reports to the governors of the States and to the Congress. That is not what we were thinking about. We were thinking not that the Interagency Committee of the Bureaus would exercise the power of Congress, but that authority would be exercised by this committee and other appropriate committees of the Senate and the House.

QUESTION OF AGREEMENT ON CAPACITY OF RESERVOIR

I know of no report, no agreement between the Department of the Interior and the Department of Defense which sets the capacity of the Garrison Reservoir at 23 million acre-feet.

Senator YOUNG. The only authority obtained by the Corps of Engineers is this interagency agreement?

Mr. O'MAHONEY. Yes. I have here the hearings in the House on this bill. I have in my hand part I, at page 626, at which we have the testimony of General Potter with respect to the Garrison project.

Congressman Davis was questioning the general with respect to this point that I am raising here today. I am reading from page 632:

Mr. DAVIS. I understand there is in effect, General, the so-called Millikin amendment which provides that operation of the pool shall be only for such uses as do not conflict with any beneficial-consumptive use in States lying wholly or partly west of the 98th meridian of such waters for domestic, municipal, irrigation, or industrial purposes. I assume the States west of the 98th meridian would include practically all of the area affected by the Garrison Reservoir; is that correct?

General POTTER. That is right.

Mr. DAVIS. Does that conflict in any way with the operation of the 1,850-foot pool as you conceive it?

General POTTER. No, sir; because the waters will be used for consumptive purposes when they are used for irrigation.

MEANING OF HOUSE TESTIMONY

What did General Potter have in mind when he said that? Existing beneficial uses? Not at all. New uses somewhere else. The amendment which I presented upon the floor said that the operation should not be in conflict with existing or potential uses, meaning in the locality. Well, this is what the general meant, and I am quoting now from page 632:

Mr. DAVIS. I understand that one stage in the controversy, General, the suggestion was made that you ought to wait in establishing this 1,850-foot pool level until the Department of Interior had looked into the irrigation phase of this problem. Do you know whether or not Interior has looked into that?

General POTTER. Yes, sir. That statement was caused by the fact that there were some proponents of irrigation from Fort Peck into the Missouri-Souris. Since those days the valuation of the Missouri-Souris has been shown that most of those lands are not irrigable, due to the highly compacted glacial soil which will not permit fertilization. The Bureau of Interior has completely reversed their former stand and is now asking me when we will be ready to design the Snake Creek pumping plant which takes the water from Garrison, rather than from Fort Peck, over in the eastern Souris area rather than the northern Souris area.

Here the general is saying to the committee just a few weeks ago, that he has not yet drafted the plans to take this water from Garrison to the injury of present users! Where will he take this water when he draws those plans? "Over in the eastern Souris area rather than in the northern Souris area." And those farmers of North Dakota, living right outside of the town of Williston, who have been irrigating their lands with private systems for years, must now be faced with condemnation suits, so that Uncle Sam may take the title to their farms, on which they have water, while the Army engineers are helping to draw the plans for a new irrigation project which was not concerned or authorized in any law passed by Congress. It was not authorized for the Bureau of Reclamation, so far as I know. It is not authorized for the Army engineers.

What we are going to do, Mr. Chairman when we are faced with a direct and specific provision of law which says "You shall not touch these present and potential uses in the area through which the water flows?

EFFECT OF PROJECTED POOL LEVEL

Flooding the reservoir area to the 1,850 pool level will inundate the waterworks of the city of Williston. I do not believe that any member of this committee is aware of the fact that the Army engineers have offered already to spend money to build a new waterworks for the city of Williston. There is no authority for it. Domestic water rights are protected here by the O'Mahoney-Millikin amendment. Do the Army engineers understand that? Yes they do. Read the question of Congressman Davis and the answers of General Potter:

Mr. DAVIS. What do you consider the significance of the Millikin amendment to be at the present time?

General POTTER. Water is becoming increasingly valuable in the Northwest and the West—nobody knows it better than the farmers in Williston—in fact, to the people out there, water is more valuable than gold. That amendment was to protect the rights of the people in the irrigation sections of the country to the use of the water that was generated in their area.

Right.

And prevent transporting that water to areas east of the 98th meridian for navigation and things like that.

Right. He is correct.

EXISTING PROJECTS TO BE FLOODED

Senator ELLENDER. Senator, are there any in the area who will be deprived of this water?

Mr. O'MAHONEY. Yes; they are. I have marked the maps to show what will happen.

Senator ELLENDER. You mean that if the levels are kept at that figure?

Mr. O'MAHONEY. If the dam is operated at the 1850 level these existing projects will be flooded unless the engineers build dikes, but they are already seeking to condemn these lands. They propose——

Senator ELLENDER. I understand.

Mr. O'MAHONEY. Levees to protect the city of Williston. Why? Because this elevation at 1850, if it is operated at that elevation, will flood these areas.

Senator ELLENDER. I understand. Would there be some farmers who would lose at the level that the dam was to be built and the water maintained?

Mr. O'MAHONEY. At the 1830 level? Not to my knowledge. There was no irrigated land there at all.

Senator ELLENDER. Is that right? I did not know that.

FURTHER CITATION OF HOUSE RECORD

Mr. O'MAHONEY. I will show you on the map in just a minute. Let me return to the House record.

Mr. DAVIS. Did the Missouri Basin Interagency Committee look into this situation with respect to the water in that area?

General POTTER. Yes, sir. The Missouri Basin Interagency Committee in their water-sufficiency study prepared that study on the basis of the O'Mahoney-Millikin amendment.

Mr. DAVIS. What conclusion did they reach?

General POTTER. That there was sufficient water for all purposes within the immediate foreseeable future.

Where is the phrase "the immediate foreseeable future" in the O'Mahoney-Millikin amendment under which the Garrison Dam was authorized? It is not there, and that is not what the general was thinking about.

Our studies did show—

this is General Potter—

that when there is a 100 percent irrigation demand, and we do not know when that will be, that in the driest of the drought years, similar to the 1930 drought, the ability to provide water for navigation might be impaired in some years. This water sufficiency study was based on the record from 1898 to 1950, and we operated not by hindsight but operated our reservoirs in that study according to the amount of water that we thought we were going to get during that year.

What is the general telling us? He is telling us that his studies of the water supply were such that they were going to get plenty of water for navigation except that it might be impaired in some years in the unlikely case when there should be a 100-percent demand for irrigation.

O'MAHONEY-MILLIKIN AMENDMENT A PERMANENT AND PERPETUAL PROTECTION TO WATER USERS

The O'Mahoney-Millikin amendment was a permanent and perpetual protection to the users on the ground now, for their beneficial consumptive use of the water. Why then should these existing irrigated acres be flooded or condemned when in the language of General Potter navigation uses would be threatened only in the "driest of dry years?"

Now, Senators, you have asked about this map. If it would be convenient for you to come to the table, I am sure that the maps would be more easily examined.

Now, this is sheet No. 11, and you will observe the great efficiency of the Army engineers. On this diagram here to the right are set forth the representations of various sheets, indicating the place that each particular sheet covers.

This sheet 11 is pretty close to the town of Williston. The brown line, the 1830 level is there, you see.

Here is the Missouri River. Here is Williams County, and McKenzie County. Here is General Potter's brown line. That is all the land that will be taken there, and on this side of the river, that is all at 1830.

But look at what 1850 does. Here is the Lewis-Clark project right in the middle of the inundated area.

Now, there is no way in the world that the Army engineers can protect that project except by building levees, and the testimony before the committees is that they do not have these levees as yet fully planned. The evidence here is to the effect that the full height of the levees has not been determined, and the money they are asking for is for a levee which will be high enough for present purposes, but which can be built higher in case of need.

Here on this side of the river again we have a 5,000-acre irrigated project which has been operating for the past 10 years. It will be flooded unless the dikes are high enough to hold the water back.

Senator YOUNG. May I ask the engineers at this point what access

the farmers would have to the Lewis-Clark project if the dikes were built around there?

STATEMENT OF ENGINEERS

General CHORPENING. If the dikes were built, they would have access from this side. The levees would come in, in such fashion as to protect the area from the river.

Mr. O'MAHONEY. But the levees are not planned.

General CHORPENING. We have not completely planned them yet; no, sir. We have not gone that far with construction yet.

Mr. O'MAHONEY. Nor with the planning.

Senator YOUNG. This is the river side. If the dam was at 1850-foot level the water would come to here. What access would they have to this project? It could not be from the river side.

General CHORPENING. No; the levee would be so built. I do not know which part is irrigated.

Mr. O'MAHONEY. Here is an irrigation ditch drawn by the Army engineers to show the committee where it is.

General CHORPENING. The levee would come in here.

Senator YOUNG. The access would be back on this side some place?

General CHORPENING. The levee comes from some high ground to another. They still have access as they have now.

Senator YOUNG. General Chorpening, you keep pointing to the river side. If the reservoir was filled at 1,850 feet, you would not have access to the river side.

General CHORPENING. Access would be from the land. That is where these people would live, here.

Senator ELLENDER. The levees would be so built?

General CHORPENING. So as to protect this area; yes, sir.

Senator ELLENDER. In building this levee, General, would any people be deprived of water that they are entitled to; that is, people now irrigating lands.

General CHORPENING. No, sir.

Mr. O'MAHONEY. If your unplanned levees work.

Senator ELLENDER. That is what I am saying.

Mr. O'MAHONEY. That is an assumption. The General is talking about levees that have not been planned, but plans for condemnation and purchase are proceeding.

General CHORPENING. We have built lots of levees.

INEFFECTIVENESS OF PREVIOUS LEVEES

Mr. O'MAHONEY. Did they not go out in the last big flood? I sat on that desk there and heard the testimony about the way the water went over the levees.

Senator ELLENDER. There is no assurance that the levees would not be a great hazard to this land here that is now cultivated.

General CHORPENING. I do not think that they would be a hazard, any more than the levees in your country are a hazard. We know how to build levees, I think, as well as anybody in the world, and they would be as secure as any levees possibly could be. We have had some experience now in building levees on every type of soil and every type of condition that you can imagine, and we have been successful. If

water runs over the top of them, Senator, that is something else, but we design against the maximum high.

Mr. O'MAHONEY. I have also shown the record here in which General Potter showed the danger of flood. It was not very much.

Now, Mr. Chairman, I would like to call your attention to sheet number 14. This is the very eastern end of the town of Williston as it existed at the time this map was drawn. Now, efficient and able and exact as the Army engineers are, they have not been able to keep up with the Williston boom. This town has been built up over here, as you know. Within 38 miles of the town is one of the big oil fields. That is within 38 miles of the town, and the testimony before the House, given, I think, by General Potter, was that the price of land has skyrocketed, and land that they used to be able to buy for 25 cents an acre because it was dry land and not irrigated now is carrying a demand of $200 to $300 an acre.

Senator YOUNG. That is just for leases.

Mr. O'MAHONEY. Yes. I do not need to tell the Senator from North Dakota that this is the Fair Grounds Race Track here, but it is clear that, operated at the 1,850 foot level, that would be inundated.

Senator ELLENDER. Would that be protected by levees?

General CHORPENING. Yes.

Mr. O'MAHONEY. This line shows the protection of the Great Northern Railroad. Here it is. That is apparently protected. The Great Northern Railroad has already built a half dozen spurs in here to new warehouses that have been built in here. The area below the 1850 level.

General CHORPENING. The levee would be built right across here.

Mr. O'MAHONEY. To what height, General?

General CHORPENING. It would be some height higher than 1850, whatever the proper freeboard that we considered right there.

Mr. BEARD. Around 1860, General.

Senator ELLENDER. How much would that be above surface?

LEVEES UNPLANNED

Mr. O'MAHONEY. 1862 is probably the height you have in mind, but it is acknowledged that the levees are unplanned.

Senator ELLENDER. How high would those levees be from the land?

General CHORPENING. I do not know if they show contours here.

Mr. O'MAHONEY. Here is 1852.

General CHORPENING. I would say not over 12, 15 foot levees—that is not high, as levees go.

Senator ELLENDER. That is very low.

Mr. O'MAHONEY. Here is another map. This is the town of Williston again and here is the 1850 level and here is the land under irrigation. Here is a rich alfalfa field that would be flooded. The estimates have not been made. The plans for the levees have not been drawn.

CARRYOVERS

The testimony of General Potter before the House committee is to the effect that you have a carryover now of about $9 million and that is with the levees not being planned, as General Chorpening has ac-

knowledged here. I find on page 627 of the House hearings, the following figures under item 3–B:

Williston protective works, $934,000; protective works, Buford-Trenton unit, No. 3, $2,648,000; protective works, Lewis-Clark irrigation, $3,055,000.

Here we have a total of $6,637,000 in this appropriation before you for protective works which have not only yet been designed, but have not yet been submitted to either the committee in the House or the committee in the Senate or the local authorities.

Mr. Chairman, it is rather interesting to note these carryovers. As I have had occasion to point out many times in this committee, there are five little words tucked away in the appropriation item of almost every bureau or agency; namely—

to remain available until expended.

So once you make an appropriation to which that little tail of five words is attached, that money is at the command of the agency to whom it is made available as long as it is not expended, and you do not have another chance to look at it.

Senator YOUNG. There is a carryover of over $6 million for the protective works in the present bill?

Mr. O'MAHONEY. No; there is a carryover of over $9 million. General Potter thought that perhaps he was a little bit optimistic when he said that, but that comes on pages 629 and 630 of the House hearings:

Mr. DAVIS. Now, according to the figures that we have there was an unexpended balance of over $1 million on this project as of the first of the year and an anticipated unexpended balance of about $9,250,000 at the end of the year. If you have been able to keep on schedule and have that kind of a balance available, does that mean that you will probably be working at top speed if you receive less than the $31 million requested?

General POTTER. No, sir; we will be under way at full speed within 2 months on the powerhouse. That is a $10 million job. The stage 4 and stage 5 earthworks involves the closing of that river so that it cannot overflow in the next spring flood, and that will require 24-hour operation in order that we will not jeopardize the safety of that structure. There is a considerable amount of funds unexpended and I will be glad to admit to the committee that the $9,250,000 that we say will be unexpended at the end of June might be too optimistic. It depends upon the kind of a spring that we have.

SUGGESTED DEDUCTION OF ESTIMATE

Now, I do not insist that you take this figure which was given to the House committee at $9,250,000 as the proper measure, but I think it would not be unreasonable if the committee should decide that the $6 million-plus which has been put in the estimate for the designing of protective works to protect present beneficial uses, should be deducted. I do suggest that that money might very well be deducted in the present state of the record because the plans have not been submitted to the people whose lands will be affected. Moreover, it seems to me that since the act of December 22, 1944, refers to potential uses, and on these maps I can mark out to you areas near the town of Williston for which plans have already been devised for reclamation, that the $6 million might very well be taken out of this appropriation with instructions that no money be spent for levees until a much better explanation has been made at to why an interagency committee meeting has been regarded as equal to a report to the Secretary of the

Interior and the Secretary of Defense, and a report to the committee.

Senator YOUNG. Senator O'Mahoney, I would like to ask a question at this point.

PROTECTIVE WORKS

According to your figures, General Chorpening, how much money do you have in the present bill for protective works, and what do protective works consist of?

General CHORPENING. I think that is on page 627 of the House hearings.

Mr. O'MAHONEY. That is what I was reading.

General CHORPENING. Protective works at Williston, $934,000; Buford-Trenton, $2,648,000; and Lewis-Clark is $3,055,000; and that is proposed to be done in fiscal 1954.

Senator YOUNG. Why do you have that much money in this bill for protective works, which you would not need until the reservoir was filled to an elevation of 1,850 feet, and you could not possibly get to that level for several years?

General CHORPENING. We made closure just recently, and now we are building up the dam and we must be starting in and making proviison now so that, as we get the closure built up to the height of 1,850, that we do have the protection at the headwater of the reservoir at Williston, and these irrigation units, protection against the maximum possible elevation. Now, the two sides of the dam are already up to the elevation that we are talking about.

ESTIMATED TIME TO FILL RESERVOIR

Senator YOUNG. Under normal conditions, would it not take several years to fill the reservoir to 1,850-foot elevation?

General CHORPENING. Under normal conditions we would expect that.

Senator YOUNG. How long would it take under normal conditions to fill the reservoir to 1,830 feet?

General CHORPENING. I think you would have to take an average of the hydrograph that we have shown here. I would think it would indicate probably 3 or 4 years, but once you close a river you want to be prepared to protect any lands that might be flooded, or any cities that might be flooded, to the full height of the reservoir.

Senator ELLENDER. In case you would have a lot of water coming down, are you prepared, in the absence of these levees, to let it go on down the reservoir?

General CHORPENING. We could, of course, open up our outlets.

Senator ELLENDER. Could you protect, even though the levees were not built?

General CHORPENING. Yes, sir, but we feel once we have the dam in there that we should be in shape to make maximum possible use of that reservoir as it has been built.

Senator ELLENDER. Are we to understand, General, that by erection of these protection levees, no farmer will be deprived of the use of his lands, that is, those that have been irrigating?

General CHORPENING. Yes, sir; that is my understanding.

Senator ELLENDER. That would, of course, conform to the so-called O'Mahoney amendment, that people would not be deprived in that locality?

General CHORPENING. We consider it so; yes, sir.

LAND PROCUREMENT

Senator YOUNG. When do you plan to acquire the land in the reservoir area up to the 1,850-foot elevation?

General CHORPENING. We are going ahead with that now, sir, because we have made closure, and we must then, as we are going ahead with closure, proceed with the land procurement to correspond to the elevation that we could store water.

Senator YOUNG. You have not mapped out a program where you would acquire 1,830-foot first and then 1,840 and 1,850 afterward?

General CHORPENING. It is done progressively on all projects, Senator. We buy land as we proceed with the construction, and it is only logical that now that we have made closure of the dam we proceed with the procurement of the remainder of the land.

Senator YOUNG. There would not be any particular harm done in this project, though, if we postponed the 1,830 to 1,850 land acquisition for several years?

General CHORPENING. We should go ahead now. It is the logical sequence of events.

Senator YOUNG. If you plan a dam an operating level of 1,850 feet that would be the case. However, you could proceed to buy the land necessary for the 1,830-foot pool elevation and wait 2 or 3 years. Then if Congress requests you to do so, you could acquire lands from the 1,830-foot level to 1,850-foot level.

General CHORPENING. Well, if we did that, then we have a structure that we could not get the maximum utilization out of a project that we cannot make full use of.

Senator YOUNG. But under normal conditions you would not get that water up to 1,850 feet?

General CHORPENING. Yes, sir; but I do not know whether normal conditions are going to be in effect.

Senator YOUNG. Under normal conditions, about how long would it take to get the reservoir up to 1,850?

General CHORPENING. That is a matter of checking the records of fifty-some years, and considering what is about the norm. Now, it is true that if you take the period in the thirties when there was a drought everywhere in that country, that it would take longer, but also there were wet years, when it would be faster.

PROTECTION OF IRRIGATED LANDS

Senator ELLENDER. General, as I understood Senator O'Mahoney, he said that part of this water would be used to irrigate lands away from this area of the people who are really entitled to it, and who, under the O'Mahoney-Millikin amendment, would have first preference for it. Is that correct?

General CHORPENING. Well, no, sir.

Mr. O'MAHONEY. That is what General Potter said.

General CHORPENING. I think I can explain it, Senator. We are proposing to protect the lands that are irrigated here by levees.

Senator ELLENDER. I understand that as far as protection is concerned. Is any of this water going to be used to irrigate lands away from this dam to the detriment of those entitled to it under the O'Mahoney Act?

General CHORPENING. I do not consider that it is going to be used to the detriment. There is water to be used in irrrigation of other parts.

Senator ELLENDER. But not to the detriment of those now entitled to it?

General CHORPENING. I do not consider it.

Mr. O'MAHONEY. May I interpolate a word there, because of the question that Senator Ellender asked?

Senator ELLENDER. I am trying to get both sides. You made that specific statement.

SUBMISSION OF PLANS TO LOCAL AUTHORITIES

Mr. O'MAHONEY. It still stands, as I was quoting from General Potter, but I submit to the Senator, that under an act which specifically commanded the construction agencies to confer with the local people, with respect to their plans and proposals, the judgment of the Army engineers that the dikes they would design are sufficient to protect the community and the consumptive uses, is not sufficient. It should be submitted to them before the appropriation is made or the dikes built.

Senator YOUNG. Senator Ellender, the irrigation project on which they are working now in North Dakota, has been approved by the State Water Commission. The Bureau of Reclamation envisions a diversion out of Garrison Reservoir. I think it is fair to say than an 1,850-foot elevation would make it easier to irrigate that area. You would have to pump 20 feet less than at 1,830. Too, water would have to be pumped further for the Garrison diversion if you limited the pool level to 1,830 feet.

Senator ELLENDER. You would have to raise the water higher.

General CHORPENING. That is correct.

Senator YOUNG. That is the project on which we are working and which we hope to get some day.

Mr. O'MAHONEY. May I add a word?

Senator YOUNG. You may proceed now. I am sorry for the interruption.

JOINT REPORT

Mr. O'MAHONEY. I have taken a lot of time and I think the issue is clear. I refer now to Document 247 of the 78th Congress, which is the report signed jointly by Commissioner Bashore and General Reybold.

Paragraph 10 refers specifically to the Garrison Reservoir, and I invite your attention to it:

> The Garrison Dam Reservoir and powerplant was included in the coordinated plan as it provides a large volume of useful storage capacity for flood control, navigation, and irrigation, and permits the utilization of approximately 160 feet of head for the development of hydroelectric power in an area capable of absorbing the potential output and which otherwise has no prospective source of abundant low-cost power.

I interpolate there, Mr. Chairman, that the people of North Dakota are well aware of the great deposits of coal that are to be found in that State, and that coal is a source of electric power.

This is the next sentence. Observe this sentence:

However, a large reservoir at the Garrison site, situated immediately below the Yellowstone River with its large silt contribution will prolong materially the life of downstream reservoirs.

They were thinking of prolonging the life of downstream reservoirs, rather than the life of this irrigation project that has been operating for 10 years, just outside of Williston, by protecting the downstream reservoirs through the Garrison Dam from the silt deposited in the Missouri from the Yellowstone River. Now, that Yellowstone River comes into the stream above the city of Williston. Part of the silt and a very large part of the silt with which the Yellowstone is loaded, or has been loaded in the past, comes from the State of Wyoming, because the Big Horn River, one part of which is called the Wind River, is one of the tributaries of the Yellowstone.

After this report was written the Bureau of Reclamation built the Boysen Dam, just south of the city of Thermopolis, in Wyoming, and if this committee could go out and stand on that dam today it would see that the silt which the authors of this report wanted to store in Garrison is already being stored way above. So they do not need to operate Garrison at as high an elevation as a protection from the silt deposited from the Yellowstone River. Nor does the city of Williston need to have so much fear.

LEVEES NOT WANTED

So, Mr. Chairman, we have here first the law which specifically and definitely protects existing and potential beneficial uses. For that, the Army engineers would substitute not the protection of the law, but the protection of the hope of the Army engineers that the levees that they have not yet designed and have not yet built will be better than the law, to protect the citizens of North Dakota. We have the fact that other structures above the Garrison Dam, notably the Yellowstone River, are already holding back silt. We have the table, the chart sent in by General Potter, which shows that 54-year period of waterflow in the Missouri River, and shows that even if the Garrison Dam were standing at 1,850 feet all that time, not more than 4 years in the whole period would the flow have risen above the 1,850 level. No levees would have been needed in 54 years, and the people of Williston do not want any levees.

There is a carryover of at least $9 million and, as the chairman has well said, since the dam cannot possibly fill within a year, or maybe 2 or 3 years, what is the rush to have this money in the appropriation bill with the 5 little words attached, "to remain available until expended."?

PROTECTION UNDER ACT URGED

Let us get the facts in a joint report, presented to the Congress, as the facts were presented when the project was first authorized, and let us give the people of North Dakota the protection of the act of December 22, 1944. That can be done very easily by a few words in the bill or in the report, by the rejection, the elimination from this

appropriation of the money estimated for the construction of dikes, until the committee has had an opportunity to see for themselves whether or not the dikes would be sufficient, until the people affected most directly have an opportunity to speak for themselves. There will be no loss.

Senator ELLENDER. Senator, suppose that this study is made as you propose, and that it would be found unnecessary for dikes to be built, would not a lot of work be done in the meantime that would be useless, if it is found that the dikes should not be built?

Mr. O'MAHONEY. Certainly, if the money for dike building stays in the bill.

Senator ELLENDER. Why not stop the whole thing?

Mr. O'MAHONEY. Stop the dikes now. Let us wait. But don't forget the base of the Garrison Dam was planned from the beginning to support a level of 1,850 or more.

Senator YOUNG. Senator Ellender, I really think that the appropriation for acquiring land beyond the 1,830-foot operational level should wait 2 or 3 years.

Senator ELLENDER. And carry out the program as intended?

Senator YOUNG. Yes. They could acquire that land necessary to operate at the 1,850-foot level 2 or 3 years from now, and I do not think that any harm would be done.

Senator ELLENDER. But you still desire to build it up to 1,850?

Senator YOUNG. I think that is desirable.

Senator O'MAHONEY. It is not a question of building, it is a question of operation.

Senator YOUNG. It is already being built.

Senator ELLENDER. That is what I am saying. This money is going to be spent to make it necessary to build these dikes.

Mr. O'MAHONEY. It is not necessary because, as I say, the report of the general on the water study of the 54-year period shows that even had the dam been existing all that time there would not have been any flood in the town of Williston.

General CHORPENING. It should also be mentioned that this same chart shows that a great amount of the time the water would be higher than 1,850, and, as we go ahead with closure here, our spillway was designed for a reservoir built to 1,850 and if we do not go ahead and buy the lands now with the development in that area it is going to cost the Government more for those lands. Further, we need them.

Mr. O'MAHONEY. General, are you counting in the damages of the propertyholders, whose property you are going to take?

General CHORPENING. I am sure the development will be considerable up there. I have heard testimony—and the land will cost more if we wait.

EFFECT OF POSTPONEMENT

Mr. O'MAHONEY. Would anybody lose anything, even the engineers, if this were postponed for at least a year?

General CHORPENING. Yes, sir. We ought to go ahead with this project now, having proceeded as many years as it has on the basis of 1,850. We would possibly lose the ability to use the project.

Senator ELLENDER. The purpose of postponement would probably be to defeat the building of the levees eventually. The question that I would like answered is this: Are we not spending money now to make it 1,850?

Mr. O'MAHONEY. We have been from the beginning, Senator Ellender, but the height of the dam is not in issue. We are talking about the flooding of lands which are protected by the O'Mahoney-Millikin amendment. Levees, which have not yet been planned, will involve a waste of money, particularly since they cannot possibly be needed, even if the engineers are right, for 3 or more years.

General CHORPENING. That is correct, and I may say that the top 20 feet of this reservoir, the estimated cost as against the benefits, comes out to a benefit cost ratio of around 7 to 1.

OIL EXPLORATION

Senator YOUNG. General, there is another story that you have not told. As you know, there is great exploration for oil in that whole area. As a result, there is a lot of buying and selling of mineral interests and leases. You are going to pay a terrific price for that additional land up in that Williston area if you go ahead with the acquisition presently. I suspect that when we finally finish our exploration, there will be a cluster of wells here and there, as in any oil State, and values will level off. If you are to acquire that land in the area now, and go to court, which you will probably have to do to get it, you are going to have to pay a terrific price. If you wait, you quite possibly could buy it at a cheaper price.

General CHORPENING. Our policy is to buy without mineral rights.

Senator YOUNG. That is another story in itself. When you flood that area the mineral rights would not sell for as much as they would otherwise.

Senator ELLENDER. There they would, Senator.

Senator YOUNG. I think any oil driller would be at a disadvantage in additional cost in slant drilling under the reservoir, to get at some oil.

General CHORPENING. I do not believe there has been oil discovered within quite a number of miles of that area.

Senator YOUNG. It is very close, and all that land is high priced now because of this speculative interest.

Mr. O'MAHONEY. Mr. Chairman, I think I have completed my statement, except to say that land above the 1,850 level is being condemned now, thus emphasizing the fact the people of the Williston area and their representatives do not know how far the inundation will go.

I should add that Senator Langer was prevented from being here today. He may seek to have an opportunity later to present his views on this matter, which I understand are in harmony with those that I have expressed.

As I said at the outset, Congressman Burdick told me this morning that he would come here if it all possible to do so. I think that he is probably making the same fight on the floor.

Senator YOUNG. Senator Langer has been having a checkup at the hospital.

Senator, you presented a good case. You have not slipped as a lawyer. If I am ever in court, I want to retain you.

ARTHUR KILL SECTION, NEW YORK-NEW JERSEY CHANNEL

STATEMENT OF HON. JOHN H. RAY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

GENERAL STATEMENT

Representative RAY. I have a very short statement to make about the waterway between Staten Island and New Jersey, about which I believe you had some testimony last Friday.

There are two projects there, one to remove an old railroad bridge which is an obstruction to navigation.

Senator YOUNG. Yes, sir; the witnesses were here last Friday.

Representative RAY. I do not mean to go into the technical side of that. I wanted to come here to stress that the major project from our point of view—and I live in Staten Island, which is one side of that channel—is the bridge removal.

The No. 2 project is the deepening of the channel from 30 feet to 35 feet in the center 6-mile section, a project authorized by the Congress for some time, which has been bitten at from each end, but the controlling part is the middle part, and no progress has been made with that.

IMPORTANCE OF WATERWAY IMPROVEMENT

I urge that you get into the record the ideas of the Corps of Engineers as to the importance of the improvement of this waterway, the relative rating of the two projects, and the figures involved. The Corps of Engineers' representatives are here and a few questions would complete the record.

Senator YOUNG. Congressman Ray, would you like to ask some questions of the representatives of the Corps of Engineers who are here, to bring out further facts on this project?

Representative RAY. Yes, sir. My first question concerns the importance of that waterway. That should be developed in this record.

Colonel MILNE. The Arthur Kill section of the New York-New Jersey Channel is without question an extremely important waterway, not only to New York Harbor, but to the country as a whole. To give you an idea of the volume of traffic that is handled in that waterway, in 1951, approximately 50 million tons of commerce went over that particular waterway.

Senator ELLENDER. I think that that was forcefully brought out last week.

Colonel MILNE. That was brought out last Friday.

Senator ELLENDER. That was brought out by a number of your constituents, Congressman Ray.

Senator YOUNG. Congressman, do you want to ask any further questions of the representatives?

AMOUNTS REQUESTED

Representative RAY. I would like to cover the amounts that ought to be appropriated for these two projects.

Colonel MILNE. The original appropriation for the Arthur Kill section, in deepening the channel from 30 to 35 feet was an item of

$1,900,000 to initiate that work. That particular project was not contained in the revised budget due to the budget criteria, so I think, to answer the Congressman's question, work could get under way with $1,900,000.

Representative RAY. What is the appropriation needed for the bridge removal?

Colonel MILNE. On the removal of the Staten Island Bridge you have the same problem as the Meredosia Bridge. You must have the entire appropriation before work can begin, and the Staten Island Bridge is about $6 million. I would want to verify that neighborhood.

(The information was not furnished the committee.)

Senator ELLENDER. That is the Federal Government's share?

Colonel MILNE. Yes.

Representative RAY. As to the relative importance of the two projects, which should have priority?

Colonel MILNE. As between Arthur Kill and Staten Island?

Representative RAY. As between the bridge and the channel deepening—or must they go together?

Colonel MILNE. Well, the one would not be completely effective without the other. In other words, if you remove the bridge and build a new bridge and still have the 30-foot channel, you have accomplished something, but you do not have the maximum benefit. They both should be done, Congressman.

Representative RAY. Thank you very much.

May others who are interested in this file their statements, sir?

Senator YOUNG. Yes, Congressman, we will be very happy to file them.

Representative RAY. Thank you very much.

Senator YOUNG. I would like to ask one more question on the Garrison Reservoir.

What land would be affected above the 1,840-foot elevation? For example, if you operated at 1,840, would that leave in the clear the Lewis-Clark and Buford-Trenton irrigation projects?

General CHORPENING. I do not think so, sir. I would like to check that. I do not know of my own knowledge, but I believe they would still be affected. I can check that. Does anyone here know for sure about that?

Colonel POULES. I think that is correct, sir.

General CHORPENING. I think that we should put a statement in the record on that, sir, because I am not positive.

Senator YOUNG. Would you do that?

General CHORPENING. Yes, sir.

(The information was not furnished the committee at the time of printing.)

QUESTION OF LAND VALUE

Senator YOUNG. I am a little concerned about the question of this land in the Williston area now, with the oil boom going on there. If you could postpone part of those purchases beyond the 1,830- or 1,840-foot elevation for 2 years, I think that you could buy that land much cheaper.

General CHORPENING. It might cost a lot more, sir.

Senator YOUNG. I do not think that it would.

General CHORPENING. We are buying, as I said, less mineral rights.

(The following information was furnished:)

The 1,840-foot level without levees would endanger the Lewis and Clark Irrigation District and probably the lower unit of the Buford Trent District.

ALASKA PROJECTS

Senator YOUNG. The committee has for consideration a resolution of the House of Representatives of the Territory of Alaska. That resolution will be inserted in the record at this point.

(The resolution referred to follows:)

A resolution of the House of Representatives of the Territory of Alaska; to the Committee on Appropriations:

"House Memorial 22

"To the Congress of the United States; to the Bureau of the Budget; and the Honorable E. L. Bartlett, Delegate to Congress from Alaska:

"Your memorialist, the House of Representatives of the Legislature of the Territory of Alaska, 21st session assembled, respectfully represents:

"Whereas the United States Army engineers have approved 12 or more harbor projects in Alaska during the past several years; and

"Whereas these harbor projects have not been completed because of lack of sufficient appropriations; and

"Whereas many of these harbors are fast becoming overcrowded by our fishing fleets; and

"Whereas this harbor-improvement program has a direct bearing on the defense program, not only as it affects food production, but also because the improved harbor facilities would not only provide sufficient safe anchorage for fishing vessels but would also provide good and adequate harbors for the many Government vessels in Alaskan waters.

"Now, therefore, your memorialist, the House of Representatives of the Legislature of the Territory of Alaska, respectfully prays that Congress make a sufficient appropriation to complete those harbor projects which have already been approved for Alaska by the United States Army engineers.

"And your memorialist will every pray.

"Passed by the house March 26, 1953.

"GEORGE J. MISCOVICH,
"Speaker of the House.

"Attest:

"MARGARET GRISHAM,
"Chief Clerk of the House."

PETERSBURG HARBOR, ALASKA

Senator YOUNG. The committee has for consideration a letter from Senator Hugh Butler concerning the need for improvement of Petersburg Harbor. That letter will be inserted in the record.

(The letter referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
May 18, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Civil Functions,
Senate Appropriations Committee,
Washington 25, D. C.

MY DEAR SENATOR: For your information, I am quoting in part a telegram received from Mr. Earl N. Ohmer, of the Petersburg Chamber of Commerce, Petersburg, Alaska, relating to the project to improve the Petersburg Harbor:

"We are advised Senate and House committees are now meeting to consider appropriations for river and harbor improvement which may include Petersburg Harbor and which is approved by United States engineers and is an unfinished

project. The improvement of our harbor will be of great value to our fishing fleets and also to Government and other boats which use our harbor and will be of great assistance also to the production of fish and shellfish. Department Interior, Agriculture, and United States Coast Guard each have warehouses, floats and boats stationed and operating at Petersburg."

I hope this matter may receive the consideration of your appropriations subcommittee.

Yours very truly,

HUGH BUTLER, *Chairman.*

MORRO BAY BREAKWATER, CALIF.

Senator YOUNG. Senator Knowland has furnished for the record a copy of California Senate Joint Resolution No. 25 relative to repair of Morro Bay breakwater together with preliminary data with respect to that work. The joint resolution and supporting data will be inserted in the record.

(The material referred to follows:)

Senate Joint Resolution No. 25—Relative to repair of Morro Bay Breakwater

Whereas, The Morro Bay Breakwater which forms the harbor at Morro Bay, County of San Luis Obispo, has been in serious need of repairs for a period of two years; and

Whereas, Unless the breakwater is maintained in a proper condition, the harbor will soon become inadequate as a haven for widespread commercial fishing activities, various types of ships and small craft, and United States Coast Guard stations; and

Whereas, Extensive and serious property damage has occurred because of the inability of the breakwater in its present condition to protect the harbor of Morro Bay, and recent storms have considerably weakened the breakwater itself so that property damage is mounting in severity each day; now, therefore, be it

Resolved by the Senate and Assembly of the State of California, jointly, That the Legislature of the State of California earnestly requests the United States Army Corps of Engineers to take immediate steps to make such repairs to the breakwater at Morro Bay as may be necessary to adequately protect the harbor of Morro Bay and to protect federal, county, and private property at Morro Bay; and be it further

Resolved, That the Secretary of the Senate be hereby directed to transmit copies of this resolution to the President and Vice President of the United States, to each Senator and Representative from California in the Congress of the United States, and to the Chief Engineer of the United States Army.

Preliminary data, Morro Bay, Calif.

SPORTS FISHING BOATS ACTIVITY DURING 1952

Number of trips scheduled	578
Number of days worked	251
Number of passengers	6,189
Passenger revenue	$27,850.50

COMMERCIAL FISHING DURING 1952

Shrimp, 141,031 pounds	$70,255.50
Abalone, 414,258 pounds	74,945.84
Crab, 19,780 pounds	9,890.00
Salmon, 311 pounds	155.50
Albacore, 1,879,641 pounds	399,423.72
Other, 169,443 pounds	16,823.79
Total, 2,624,464 pounds	571,494.35

DATA RE BOATS IN MORRO BAY, STATE PARK BOAT HAVEN (PLEASURE CRAFT)

Boats in and out during 1952	100
Boats permanently based here	30
Owners waiting on improvements to locate permanently	25

COAST GUARD DATA, APR. 1, 1952, TO APR. 1, 1953

Local boats boarded	44
Temporarily based in Morro boarded	18
Transient boats boarded	178
Boats boarded, no duplications	240

Shipping worth $943,000 assisted.
County leases on waterfront: Number, 35; annual rent, $5,133.

OTHER PERTINENT DATA

1. Three launches used as tenders for Standard Oil at Estero Bay based here. In and out at least once every 24 hours the year around.
2. Forty-four million dollar Pacific Gas & Electric plant under construction on the bay.
3. New deep sea bottom fishery with estimated $3 million annual value recently found in area by research team of commercial fishermen and State department of fish and game.
4. Three hundred and thirty-nine commercial vessels have registered for watercraft exemption certificates at Morro Bay during last 3 years.

Estimated cost of breakwater repairs, $435,000.

TUTTLE CREEK DAM, KANS.

Senator YOUNG. The committee has received a statement by S. D. Flora, which will be inserted in the record.

(The statement referred to follows:)

WATERSHED TREATMENT A BETTER BET THAN BIG DAMS

Even high Army engineers have admitted in private meetings that big dams, which they advocate for the Kansas River Basin, would not have prevented the disastrous flood of 1951, let alone the granddaddy of all floods, in 1844. This statement was given out by Dr. Harold E. Myers of the Kansas State College, according to press reports.

It has been proven conclusively that the Blue River contributed practically nothing to the great 1951 flood. It has also been demonstrated to the satisfaction of impartial engineers that, had the great rains which caused the 1951 flood extended 75 miles farther east and north, no Tuttle Creek Dam could have held this water back. It is a well-known fact that Kanopolis Dam, which was supposed to protect Salina, overflowed from rains that fell the forepart of July 1951, and Salina had a flood that for damage eclipsed anything ever known previously.

It is certainly "big dam foolishness" to spend untold millions of taxpayers' money and drown out thousands of acres of food-producing bottom land to gratify the grandiose ideas of the Army engineers. Moderate floods, such as occurred between 1903 and 1951, can be kept out of the cities of the Kaw Valley by dikes. Trying to protect the farm land of the Kaw Valley by destroying the Blue Valley is too much like robbing Peter to pay Paul.

Proper watershed treatment, on the other hand, increases the productivity of uplands and eliminates destruction of the rich bottom lands. It helps in saving what has been called the precious 6 inches of topsoil that stand between this country and starvation.

Soil conservation men and farmers who have seen the effects of proper watershed treatment—terracing, drawdown dams, etc.—are fully aware of the fact that it reduces runoff to a negligible extent.

Army engineers in a bulletin issued last year stated that soil conservation, especially proper terracing, might be effective until the ground is soaked but of no value after prolonged rains. They give no reasons for this conclusion and cite no proofs. Apparently, they have not even investigated the matter.

Following is a statement by a soil conservation official who has had many years' experience in Kansas. His name and location are withheld for the very good reason that to disagree publicly with the all-powerful engineers would cost him his job.

"It is probably true that efficiency of soil conservation systems diminishes as the saturation of the soil increases. Nevertheless, it is obvious that water flowing from a system on which the grade and velocity are controlled is far less devastating than water raging down a 3- to 10-percent slope.

"There are in this area several watersheds, some quite small it is true, comprising one farm or parts of a farm, on which most soil conservation practices have been established. During 1951 we had over 22 inches of rain in June and July (practically the same as fell over the Kaw Valley) and runoff from these areas was practically nil. They were not a major contributing factor to the devastating floods that occurred here."

Such being the case, why not apply watershed treatment to the Blue Valley in preference to destroying it with a big dam? Think it over.

S. D. FLORA.

LAKE PONTCHARTRAIN, LA.

Senator YOUNG. Representative T. A. Thompson has referred to the committee a telegram from Mr. I. Newman, president of the chamber of commerce, relative to the reinstatement of funds for the Lake Pontchartrain project. He has informed the committee that he is in full agreement with Mr. Newman in his views relative to the urgent need for the full amount of these funds, as this protection is vital to that area, and he expresses the hope that every consideration will be given to restoring the full amount in the budget of the Corps of Engineers. The telegram from Mr. Newman will be placed in the record.

(The telegram referred to follows:)

NEW ORLEANS, LA., *May 12, 1953.*

Hon. T. A. THOMPSON,
House Office Building, Washington, D. C.

We urge your cooperation in securing reinstatement of funds eliminated from budget of United States Engineers for work on Lake Pontchartrain protection levee, Jefferson Parish, La. Loss of funds will endanger human lives and valuable property. Lake Pontchartrain project originally authorized in 1946. Present 8-foot levee built result review of project by Senate Public Works Committee after storm 1947 to provide interim protection. Understood not to be final project but to forestall damage pending project modification. Interim protection cost $1,400,000 Federal funds and $626,600 local funds. Modified project of more permanent nature included in Flood Control Act of May 17, 1950, to cost $3,150,000 Federal funds and $723,400 local contributions. Amount deleted from budget needed for urgent work this year to correct present serious erosion and to provide protection from recurrence of storm tides. Funds already expended will be dissipated due to erosion if project abandoned and life and property of an area of over 50,000 population and assessed valuation of over $23,000,000 placed in jeopardy. Protection vital.

I. NEWMAN,
President, Chamber of Commerce of the New Orleans area.

RED RIVER LEVEES AND BANK STABILIZATION

Senator YOUNG. Mr. W. Crosby Pegues has requested that the following telegram be placed in the record. The telegram received from Mr. Pegues will be inserted in the record.

(The telegram referred to follows:)

BATON ROUGE, LA., *May 18, 1953.*

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Public Works,
United States Senate Appropriations Committee,
Washington, D. C.

Respectfully request permission to file this as a supplemental and amended request on behalf of Louisiana department of highways and others for additional funds 1953–54 bank-stabilization and levee-protection projects, Red River, in all States affected. Have had continued rains in northwest Louisiana, east Texas, and south Arkansas ever since my return from Washington Friday of last week. I made special inspection trip of all northwest Louisiana parishes from Avoyelles north in Red River Valley Saturday and Sunday. Water continues to rise in this entire section and rains, windstorms, and even tornadoes of yesterday, last night, and today are suggesting this matter might easily become national emergency. Respectfully request that your committee earnestly consider our request for bank-stabilization and levee-protection projects to be increased to at least $2 million over and above budget allowance of $565,000. Particular needs for these funds include stabilization of banks opposite proposed new bridge Grand Ecore, Natchitoches Parish, La., and new bridge at Moncla, Avoyelles Parish, as well as several vital points from Alexandria north. Also include vital points in south Arkansas and Red River sections of Texas. Allow me to express my sincere appreciation for the many courtesies extended us at the hearings last week. Our director of highways, chief engineer, and board chairman join me in making this additional request and sincerely urge every possible consideration as our last report by radio states that at least 20 of our main-line highways are under water and practically all highway traffic as well as phone communications in Red River Valley and central Louisiana have been interrupted.

Respectfully submitted.

W. CROSBY PEGUES, Jr.,
Executive Assistant to General Counsel.

SURVEY OF SOUTHWEST HARBOR, MAINE

Senator YOUNG. Senator Smith of Maine has requested that the committee consider the appropriation of funds for a study of Southwest Harbor, Maine, and has furnished the committee supporting information. The committee has requested the Corps of Engineers to supply information as to the cost of this study.

SURVEY OF MYSTIC RIVER, MASS.

Senator Saltonstall has referred to the committee a copy of a letter he received from the Assistant Chief of Engineers for Civil Works with respect to a survey of the Mystic River for consideration of the committee. That letter will be placed in the record at this point.

(The letter referred to follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, May 12, 1953.

Hon. LEVERETT SALTONSTALL,
United States Senate,
Washington, D. C.

DEAR SENATOR SALTONSTALL: Reference is made to your letter of April 7, 1953, enclosing a resolution of the City Council, Medford, Mass., requesting information on the status of the flood-control investigation on Mystic River, and your letter of May 9, 1953, concerning the same subject.

As stated in your letter, the Corps of Engineers has been authorized to make a preliminary examination and survey of Mystic River, Mass., in the interest

of flood-control and allied purposes. I regret to inform you that very little work has been accomplished on this study at this time.

Funds for the general survey report program have been very limited in recent years. In fiscal year 1952, no funds were appropriated for the general report program. In fiscal year 1953, sufficient funds were appropriated to carry on the program at a minimum rate, permitting the prosecution of about 20 percent of the total number of survey reports assigned to the Corps of Engineers. The present approved budget estimate includes funds for the general survey report program sufficient only to carry on work in a few areas, representing about 4 percent of the total assigned reports. The amount in the approved budget estimate for 1954 will not permit work to be initiated on the Mystic River report. It is estimated that a report of preliminary-examination scope would cost $11,000 and would take about 1 year to complete.

With regard to your question as to whether the study of Mystic River would be included in the New England-New York Interagency Committee studies, I must advise that it is intended only to briefly discuss the proposal in that report. A public hearing on the proposed project could be held; however, it is believed that a hearing at this time would serve no useful purpose.

You may be assured that when conditions permit resumption of works of this nature, every effort will be made to allocate funds for initiation of the study of Mystic River with a view to completing and submitting a report thereon with recommendations to Congress at the earliest practicable date. The enclosure accompanying your letter is returned as requested.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, USA, Assistant Chief of Engineers for Civil Works.

CITY OF MEDFORD

In city council, March 31, 1953

Offered by Councilor Vice Chairman Arthur Dello Russo

Whereas the recent rainstorms have indicated and accentuated the definite need of the construction of a dam at the Wellington Bridge, to control the tidal conditions of the Mystic River, wherein at high tide the surface drainage cannot run off into the river, thereby causing badly innundated areas of the city, especially north of Salem Street, between the Medford carhouse and Medford Square; and

Whereas several requests have passed through the city government of Medford to the Federal Government relative to taking some action to afford relief, and a bill was supposedly passed to place such a project on the list for early action in 1948: Therefore be it

Resolved, That this council does hereby petition our Representative and Senators in Washington to take immediate action to bring about the desired relief in the above matter, by pressing for the construction of a dam at the Wellington Bridge on the Mystic River; and be it further

Resolved, That a copy of this resolution be transmitted upon its passage to the Member of Congress and the two Senators from this district for their consideration and action thereon.

In city council March 31, 1953. Passed.

A true copy.

Attest:

S. B. HASSETT, *City Clerk.*

LAKE PONICHARTRAIN, LA., PROJECT

Senator YOUNG. The committee has also received a resolution from the New Orleans Homestead-Savings & Loan League relative to the Lake Pontchartrain project. The letter and resolution will be placed in the record.

(The letter and resolution follow:)

NEW ORLEANS HOMESTEAD-SAVINGS & LOAN LEAGUE,
New Orleans, La., May 12, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Committee on Appropriations,
Senate Office Building, Washington, D. C.

DEAR SENATOR BRIDGES: The 31 homesteads and savings and loan associations of the city of New Orleans are very much concerned over the elimination from the proposed Federal budget of the funds for the completion of the Lake Pontchartrain protection levee and flood-control project. They have invested millions of dollars in home-loan mortgages on property located in the area protected by the Lake Pontchartrain levee. Failure to complete this project may adversely affect the future financing of homes in this growing community.

You will find enclosed the resolution adopted by New Orleans Homestead-Savings & Loan League, which is self-explanatory.

We solicit your cooperation and assistance in the restoration of funds for the completion of this project.

With best wishes and sentiments of high esteem, I remain

Respectfully yours,

M. P. ARNOULT, Jr.,
Chairman, Taxation and Legislation Committee.

A RESOLUTION

Whereas the Bureau of the Budget has eliminated from the proposed Federal budget for the fiscal year commencing July 1, 1953, the contribution to the completion of the Lake Pontchartrain protection levee and flood-control project; and

Whereas it is the considered judgment of the New Orleans Homestead-Savings & Loan League that the completion of this project is most essential: Therefore be it

Resolved, That the Appropriations Committee of the United States Senate and the United States House of Representatives, be, and they are hereby, petitioned to restore to the budget the funds necessary to complete this project for the following reasons:

The Lake Pontchartrain protection levee project is not a new project. It is the completion of a project commenced several years ago on which Federal funds approximating $1½ million have already been expended, and funds approximating $2 million have been spent by local interests. Therefore, to abandon this project now seems to us false economy, because the money that has been spent will be lost unless the work is continued to completion;

Notwithstanding the 1947 hurricane and the storm tides that it developed which resulted in an area of 39 square miles being flooded to depths up to 8 feet with damage to 2,000 homes, a considerable amount of home financing has been continued in the area, much of which was financed under FHA and VA insured mortgages largely because the flood-control work was commenced and it was reasonable to believe that the work would be processed to completion thus preventing the recurrence of the previous damage;

Today, this area now has a population of more than 50,000 people with an assessed valuation in excess of $20 million. A recurrence of a flood similar to that which followed the 1947 hurricane would therefore do many times the extent of damage and the work is therefore urgently needed and should be completed as rapidly as possible: Be it further

Resolved, That copies of this resolution be sent to the Honorable Styles Bridges, chairman of the Senate Committee on Appropriations; to the Honorable John Tabor, chairman of the House Committee on Appropriations; to the Honorable Allen J. Ellender, Sr., and Hon. Russell B. Long, Senators from Louisiana; and to Hon. F. Edward Hébert, Hon. Hale Boggs, Hon. Edwin E. Willis, Hon. Overton Brooks, Hon. Otto E. Passman, Hon. James H. Morrison, Hon. T. Ashton Thompson, and Hon. George S. Long, Members of the House of Representatives from the State of Louisiana.

I hereby certify that the above is a true and correct copy of resolution adopted by the New Orleans Homestead-Savings & Loan League at regular meeting held May 7, 1953.

E. C. ROLFS, *Secretary.*

SURVEY OF CONNECTING CHANNELS OF THE GREAT LAKES

Senator YOUNG. The committee has received a letter from Senator Humphrey supporting an appropriation of funds for the survey of the connecting channels of the Great Lakes. Senator Humphrey's letter will be inserted in the record.

(The letter referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON GOVERNMENT OPERATIONS,
May 14, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Civil Functions,
Senate Appropriations Committee,
United States Senate, Washington, D. C.

DEAR MR. CHAIRMAN: Economic development and industrial progress in Minnesota and other Lake States, as I am sure your committeee is fully aware, is greatly dependent upon shipping routes via the Great Lakes connecting channels.

Industries and raw materials of the Great Lakes area make a tremendous contribution to our Nation's total economy, and occupy a vital role in our present defense effort. Anything retarding economic development and industrial progress in that vast area, you will agree, is against the best interest of the Nation and a setback for our defense activities.

I do not believe it necessary to further impress you, therefore, with the urgent necessity for maintaining the Great Lakes connecting channels at an adequate depth to accommodate present and future shipping requirements.

Desirability of eventually deepening these connecting channels to at least 27 feet has been recognized by the Public Works Committees of both the House and the Senate. Both have called upon the Board of Engineers for Rivers and Harbors to make a new survey, with a view to determining the advisability of proceeding at this time with whatever improvements are necessary in the Great Lakes connecting channels to provide a channel depth of at least 27 feet, and with a view to preparing up-to-date estimates of the cost of such improvements.

Such a study seems the soundest approach to a factual determination of the timeliness of this desirable development work, in relation to other public works and other urgent needs for available Government funds.

The purpose of this statement, therefore, is to strongly urge your subcommittee to make the necessary funds available to the Army engineers for the conduct of this new survey that has been requested by both House and Senate Public Works Committees. It is my understanding that the work could be carried out for $125,000. I would regard that as a sound and fully justified investment of public funds. While small in comparison to most budgeted projects, the importance of this essential first step toward future economic development in the Great Lakes area far overshadows the small amount now requested.

Let me briefly review the situation now confronting shipping in the Great Lakes, the largest body of fresh water in the world and the world's largest inland-water transportation unit.

Natural depths through the open lakes are ample for any vessel now operating on the Great Lakes system, even at low water.

Improved depths in the Detroit River, Lake St. Clair, and the St. Clair River between Lakes Huron and Superior generally were adequate for vessels operating on the Great Lakes during World War II and prior to that time. Because of the trend toward deeper-draft vessels during recent years, however, these improved depths are now inadequate to permit loading the newer deep-draft vessels on the Great Lakes to their maximum drafts except when the lake levels are at extreme high stages.

The estimated ordinary safe drafts for vessels in the improved reaches of the connecting channels between Lakes Erie and Huron and between Lakes Huron and Superior, when the lakes are at their low water and under the present state of improvements, range downward from a maximum of 23.9 feet, and are generally 23 feet or less.

It seems readily apparent, therefore, that the improved reaches of these channels require deepening to accommmodate at ordinary and low lake stages the newer deep-draft vessels capable of drafts in excess of 24 feet.

By now there should no longer be much doubt that sooner or later this great inland waterway is going to be opened to the sea.

There appears good reason to believe that at long last, Congress may soon clear the way toward realization of the St. Lawrence seaway, advocated by every President since Harding and just recently publicly supported by President Eisenhower.

For Minnesota and the upper Midwest to share in the benefits of the St. Lawrence seaway project, however, these connecting channels in the Great Lakes must be deepened.

It would be unthinkable to long deny Minnesota and the Middle West access to ocean shipping, once the St. Lawrence seaway is opened.

Duluth-Superior is already the second largest port in the Nation, in terms of tonnage handled.

Minnesota produces many products for world trade. We need and deserve our own ocean ports.

Construction of the seaway and the deepening of the channels will take a number of years to complete. They should go hand in hand. We ought to begin now, making sure the full benefits of the St. Lawrence seaway can be realized.

We need the channel deepening improvements for our own lake shipping now, regardless of progress on the seaway. But we're going to need such work all the more when the seaway is achieved, as I am confident it eventually will be, and we shall be caught unprepared unless we start now on the channel-deepening improvements.

All of us agree, however, the soundest way to start any such project is to have the most accurate facts we can obtain to guide our decisions. That is why I introduced a resolution in the Senate Public Works Committee calling for an immediate survey by the Army engineers. That is why the Senate committee concurred in my request for that survey, and why the House Public Works Committee took similar favorable action on a resolution introduced by Representative Machrowicz.

And that is why I now urge this subcommittee to include, in its civil-functions appropriations, allocation of $125,000 to make possible the survey both Public Works Committees of the Congress have deemed advisable to have made without further delay.

I would appreciate having this letter made a part of your hearing record, in support of the appropriation for new cost estimates on deepening the Great Lakes connecting channels.

Sincerely,

HUBERT H. HUMPHREY.

STATEMENT OF SENATOR HUMPHREY

Senator YOUNG. Senator Humphrey has submitted a statement for the record. That statement will be inserted in the record at this point.

(The statement referred to follows:)

STATEMENT BY SENATOR HUBERT H. HUMPHREY

I appreciate the heavy responsibility resting upon members of the Civil Functions Subcommittee of the Senate Appropriation Committee. You face a difficult task in endeavoring to reconcile the urgent need for flood protection and navigation improvements in many parts of our country with the desire for the greatest possible economy in nondefense segments of our Government operations.

You are to be commended for any economy you can achieve by eliminating waste, duplication, and inefficiency. It is in such realms that the public has been led to believe the new administration will seek to achieve economy. It hasn't been led to expect blind economy that deprives people of services and protection they believe they have a right to ask and expect from their Government. I am sure that this committee keeps constantly in mind the consequences of economies it may invoke, endeavoring to avoid the kind of foolish economy that sometimes costs more in the end.

I believe we always face such a threat in endeavoring to cut back too severely in the expenditure of public funds for the essential objectives of flood control, navigation improvement, and general development of our water resources. We've had too many illustrations of the billions it has cost the country in flood disasters, just because we hesitated in spending thousands or even millions on flood prevention. That's economy in reverse. That's the kind of blind economy we must avoid.

AVOID FALSE ECONOMY

Those few observations, gentlemen, are intended to briefly convey my concern over some of the proposed reductions in the budget estimates for the Corps of Engineers civil works program during the fiscal year ahead. I respect the desire to show economy; I only urge that the wisdom of experience temper some of the economy desires of the present, so that we don't face even greater costs in the future because of some of the savings proposed now.

Lack of adequate protection against disaster, however, isn't the only kind of false economy threatening to creep into these attempts to drastically slow down public works.

When projects have already been started, it usually costs more in the end to spread out construction time or defer funds for completion than it would have cost to forget the proposed economy in the first place.

And when failure to adequately develop navigation facilities curbs potential business and industrial expansion, the cost to the Nation in lost taxation revenue, lost new income, lost economic and material contributions, is usually far greater than adequate public investment in desirable improvements would have been if we had displayed proper foresight.

NEED ADEQUATE STUDY FUNDS

I believe it is in the Nation's best interest not to slash funds for navigation studies and flood control studies as drastically as has been proposed in the budget now before this committee. Perhaps we cannot undertake all the construction projects that are desirable and deserving at this time. We can, however, go ahead with the studies, examinations, and surveys so necessary to adequate water resource development.

With the multitude of increasingly severe water problems that confront this country, it seems a dangerous backward step to cut by some 57 percent the amount of public funds earmarked for proper advance planning as a basis for wise future decision. We urgently need such planning and studies on many of our projects in Minnesota, to which I will later refer more specifically. I therefore, urge this committee to increase such funds for navigation and flood-control studies from a combined total of $900,000, as proposed in the revised budget, to the more adequate amount of $600,000 for navigation studies and $1,500,000 for flood-control studies, as estimated need in the original approved budget.

Regardless of what is done about the total of survey funds, however, I strongly urge the earmarking of $50,000 for a survey of water levels of the Great Lakes, as proposed in both the original budget and concurred in by the revised budget.

DULUTH-SUPERIOR HARBOR

One of Minnesota's most serious concerns with the proposed budget is the elimination of $615,000 that had been earlier earmarked for harbor work at Duluth, the much needed final step in a $7.1 million improvement of the Duluth-Superior Harbor.

Gentlemen, this project is not only essential for Duluth-Superior commerce—it is of vital importance to our national defense.

Necessity for such improvement was recognized during the closing days of the 82d Congress when Public Law 568 was passed authorizing these proposed improvements for which Minnesota and Wisconsin join in asking funds.

The project calls for deepening more than 3 miles of harbor channel from 22 to 25 feet, to permit deep-draft vessels to move between Duluth and Superior Harbor basins when 1 of the 2 entries is blocked.

The existing Superior front channel presents a definite bottleneck to all carriers. With certain ice conditions, the Duluth entrance may be closed and vessels entering and leaving the harbor because of the reduced channel depths along the Superior front must do so with reduced carrying capacity.

Moreover, any accidents that might occur to ships within the Duluth entrance could conceivably require all vessels to come through the Superior front and utilize the Superior Channel, not permitting them to carry their full cargo loads of commodities. Both of these conditions have existed with the result that ore shipments in particular are curtailed. The funds we are requesting for this authorized improvement will correct that situation.

The improved harbor will provide an adequate turning basin for the larger ore vessels which now have lengths of 500 to 700 feet, and are presently delayed in making their departures.

The improvement plan embodied in this project is economically justified and from the standpoint of national defense is vitally necessary in order that a continuous flow of iron ore be maintained via vessel between Duluth-Superior Harbor and the lower lakes ports through the navigation season.

I am convinced this project is of utmost importance to the national defense of the United States as well as to the economy of the Midwest. I therefore request that the amount of $615,000 be restored to the budget of the Corps of Engineers for the fiscal year 1954, earmarked for dredging the interconnecting Superior Front Channel to a depth of 25 feet without further delay so that fully-loaded boats may enter or depart from either Duluth or Superior entrances.

ST. ANTHONY FALLS

Minnesota is also gravely concerned over elimination of $550,000 originally planned to continue work on the St. Anthony Falls project in Minneapolis. If the funds as requested are not forthcoming in the fiscal year 1954, it will mean that work now under way must be terminated. It is my considered opinion as well as that of competent engineers that disruption of work at this time will actually cost the Federal Government money, rather than be an economy move. The cost of terminating and restarting, plus the cost of protecting presently completed work during the period of disrupted conntruction, will all add to to the final costs of this project.

The importance of this project to Minnesota, and the shortsightedness of terminating work under way, was very capably explained to this committee in testimony of my good friend Hugo G. Erickson, city engineer of Minneapolis, and Arthur D. Strong, secretary of the Upper Mississippi Waterway Association. I concur most heartily in the testimony they presented. I urge the committee to consider their views very carefully, for it represents the valued judgment of competent and experienced development engineers thoroughly familiar with the current situation on the upper Mississippi.

As this committee knows, the primary objective of this project is that the city of Minneapolis in the future will have access to the pool above the Falls of St. Anthony for river terminal facilities. It involved dredging of a channel to the proper depth and width and the construction of two locks and dams. Contracts were awarded in 1948 and 1949 for the dredging, and in 1949 the Corps of Engineers awarded a contract for the construction of the dam portion of the lower lock and dam in Minneapolis. It has been a continuing contract, upon which work has been carried on ever since. The Corps of Engineers has requested $550,000 to continue the work in the coming fiscal year, but that request has been stricken from the revised budget before you. I urge most strongly that it be restored in full.

I urge you to consider the testimony of City Engineer Erickson in regard to the financial losses that will be incurred by any temporary shutdown in work on this project. I believe it amply shows such a course would be unwise, and entirely false economy. It indicates that as much money would be spent to protect and make temporary provision for suspension of the work, as the amount that is requested to continue the work the coming fiscal year. It certainly seems a wiser course to use our funds for progressing toward completion of the project, instead of for temporary additional costs that would be required to protect what has already been accomplished if work is terminated.

I wish to point out further that the original agreement for the St. Anthony Falls project required the city of Minneapolis to share heavily in the cost of the development project. The city of Minneapolis has faithfully lived up to terms of this agreement. It has already spent of its own funds $2,912,714, and has presently under contract work which will result in the expenditure of $4,110,414 in city funds by the end of this year.

Under such conditions, with the city of Minneapolis still procuring additional funds for its participation in this project through direct tax levy, termination

of the Federal Government's participation would appear to be breaking faith with the citizens of Minneapolis. I do not think this committee wants to break faith on any such agreements through which local participation in financing of such developments is encouraged. I again urge that the full $615,000 estimated as needed for fiscal 1954 for the St. Anthony Falls project be included in this committee's favorable recommendation for appropriation to the Corps of Engineers.

KEOKUK LOCK

Minnesota has a vital stake in funds for construction of a new lock (Lock No. 19) at Keokuk, Iowa, on part of the Mississippi river between the Missouri river and Minneapolis. While funds for this project have been trimmed in the revised estimates, the Bureau of Budget has wisely recognized the importance of this work being carried out.

I want to reemphasize its importance to this committee, and warn against the hazards of further cutting or eliminating these badly needed funds.

The Keokuk lock is a matter of vital emergency, in view of the precarious condition of the present 39-year-old obsolescent lock at Keokuk. It would be a matter of life and death in the wintertime in Minnesota, if the present lock should by any chance fail. If the Keokuk lock goes out, as I have warned before, there will be no fuel oil or coal in the upper part of the Mississippi; and without fuel oil and without coal which we need, we will indeed be in desperate straits. The upper Midwest is now dependent to a great degree upon river transportation for supplying such products. I am sure the committee will recognize the seriousness of this situation, and provide adequate funds for continuing construction of the new lock at Keokuk to assure its availability at just as early a date as possible.

FLOOD CONTROL

Minnesota's serious annual problem in the damaging floods occurring in many areas during the spring of the year is well known to this committee. Our losses in 1950, 1952, and 1952 have been counted in the millions. Fortunately, Nature eased off on some of its pressures this spring, and spared us some of the terrible devastation that has occurred so frequently in the past. We know from experience, however, that we can expect new troubles almost any spring until we can make further progress on organized flood-control developments along our major watersheds and their tributaries.

I think all of us who have had any experience with floods at all realize the importance of overall planning and engineering studies, rather than makeshift stopgap projects every time an emergency develops. Much of Minnesota's flood protection needs are still in that study stage, where surveys and planning are required. In our State surveys have been authorized for the Mississippi River, including St. Paul, South St. Paul, Winona, etc.; the Minnesota River, including Mankato, North Mankato, Chaska, Marshall, and other main stem communities; the Root River, covering Fillmore, Mower, Olmsted, Winona, and Houston Counties; the St. Croix River; the Zumbro River, in the vicinity of Rochester; the Chippewa River and tributaries, including Shakopee Creek and Hawk River; San Hill River; Lost River; south fork of the Crow River; and additional surveys on the Red River of the North.

These surveys are urgently needed, in view of the disasters that confronted our communities during the floods of 1950, 1951, and 1952. Adequate funds must be provided for the Army engineers so these studies can be carried forward.

Surveys in Minnesota have been completed for the Wild Rice and Marsh River project. The Wild Rice portion of the project has been completed, and considerable savings have resulted. However, now funds must be provided for the completion of the Marsh River work. This project, along with many others that are under way, will eventually result in a loss if adequate funds are not allocated for their completion. I believe that adequate funds should be appropriated so that these projects may be completed. The amount of money that must be allocated from time to time for emergency relief far exceeds the amount of money needed for completion of these projects.

RED RIVER OF THE NORTH

Of course, we also have a major flood-control construction project for which both the original budget estimates and the revised estimates concurred that $925,000 should be made available during the coming fiscal year. It is the Red

River of the North drainage basin project, covering portions of Minnesota and North Dakota.

In the past 2 years, I have submitted to this committee extensive evidence on the devastating flood damages in sections of the Red River Basin. I do not believe I need to elaborate upon these past reports, from both the Army engineers and the American Red Cross, on the terrific toll of annual floods in this area. The fact that the Bureau of the Budget did not reduce the requests for the Red River of the North flood-control project indicates it is aware of the great array of past evidence that has been submitted in support of the urgent need for additional protection. I am sure this committee is equally familiar with the urgency of that need, and will retain the funds now earmarked for this important work. I strongly urge you to do so, for the safety of the people in the Red River Basin.

LOCKING BARN DOOR

In conclusion, I want to emphasize the importance of foresight in flood prevention in terms of human life and safety.

Of course, it's always easiest to see our mistakes after some great tragedy has happened. It's easy to say more should have been spent on flood protection, after a great flood has occurred. It's not always as easy to adequately plan in advance the amounts necessary for safe protection and wise precautions along our waterways.

I'm sure all of us regret deeply that it usually takes mass tragedies of floods and other disasters to awaken public awareness and demand to the necessity of adequately harnessing our water resources, so that we can put them to constructive rather than destructive uses.

We shouldn't have to wait until after the horse is stolen. We must learn to lock the barn door of floods in advance.

And it's hardly wisdom to say we'll just put off buying the lock for the barn door for a few more years, because we need to save our money right now.

The lost horse costs much more than the lock. And floods, gentlemen, cost us much more than wise flood prevention.

BLACKWATER-LAMINE, MO.

Senator YOUNG. Representative Morgan M. Moulder has requested that the committee consider the need for a survey of the Blackwater-Lamine, and has furnished the committee copies of correspondence he has received from Mr. Steve Jackson. Mr. Jackson's letter will be inserted in the record.

(The letter referred to follows:)

BLACKWATER-LAMINE FLOOD CONTROL ASSOCIATION, INC.,
Boonville, Mo., April 24, 1953.

Hon. MORGAN M. MOULDER,
House of Representatives, Washington, D. C.

DEAR CONGRESSMAN MOULDER: On behalf of myself and the board of directors of the Blackwater-Lamine Flood Control Association, as well as the people in the area of the Blackwater-Lamine Basin, I present to you herewith the following information concerning the basin:

1. A map, illustrating the basin.[1]
2. Data, concerning the basin.
3. Letters of endorsement from various civic organizations and agencies endorsing a flood-control plan for the Blackwater-Lamine Basin.[1]

The letters of endorsement reflect the need for a flood-control plan in the basin. Before such a plan can be devised, however, the survey work in the basin must be completed. This survey work, according to estimates received from the Corps of United States Engineers, will require an allocation of $20,000 for expenditure in the fiscal year 1954. We request that this allocation be allowed by the Subcommittee on Civil Functions of the Appropriations Committee this year so that the survey work in the basin can be completed, after which a plan of flood control will be devised and submitted to the people in the area for their consideration.

[1] Filed with the committee.

It is the hope of the officers, directors, and members of the Blackwater-Lamine Flood Control Association, as well as the people in the area, that you will encourage the allocation of funds in connection with our request and that you will advise us in due time whether or not such funds will be forthcoming. Thanking you for your efforts and cooperation in our behalf, we are,

Yours very truly,

STEVE JACKSON, *President.*

DATA ON FLOODS IN THE BLACKWATER-LAMINE BASIN, JANUARY 1952

1. *Location.*—The Blackwater-Lamine River Basin is situated in the west-central part of the State of Missouri, south of the Missouri River. It is composed of the Lamine River drainage area proper, and the basin of the Blackwater River, which enters the Lamine River about 9 miles above its junction with the Missouri River. It is bounded on the north and east by several small streams that flow directly into the Missouri River and on the west and south by the Osage River drainage basin. The main source of the Lamine River is in Flat Creek and the total length of the Lamine River, including Flat Creek, is approximately 103 miles. The total drainage area, including the Blackwater River Basin, which comprises 58 percent of the total, is approximately 2,640 square miles. The length and drainage areas of the principal tributaries are shown in the following tabulation:

Stream	Length (miles)	Drainage area (square miles)	Stream	Length (miles)	Drainage area (square miles)
Blackwater River	85	1,550	Heaths Creek	22	104
Salt Fork	40	344	Muddy Creek	60	285
Davis Creek	28	237	Richland Creek	20	142
Clear Creek	22	95			
Postoak Creek	19	120			

2. *Economic development.*—The total population of the area included within the Lamine River Basin is about 106,050, of which approximately 50,100 are urban, living in cities or towns with a population of 500 or more, or suburban nonfarming inhabitants. The larger towns serve mainly as marketing and distributing points for neighboring agricultural areas. However, manufacturing is of considerable magnitude in the basin.

3. Agricultural and livestock raising are of prime importance in the Lamine River Basin, as the soils are highly productive, rainfall is generally adequate, and only small portions of the basin are too rough for cultivation. Approximately 1,518,000 acres, or 90 percent of the total area of the basin, is classified as farmland. The principal crops are corn, wheat, soybeans, and hay. A small percentage of oats and alfalfa are produced. Dairying and poultry raising are important industries in the basin.

4. The basin is well served by transportation facilities. The principal railroad lines are the Missouri-Pacific, Missouri-Kansas-Texas, Gulf, Mobile & Ohio, and Chicago, Rock Island & Pacific. Federal, State, and county highways form a network over the entire area and provide excellent connections with important marketing and distributing centers.

5. *Nature of floods.*—The normal annual precipitation in the Lamine River Basin is 38 to 40 inches, of which about 69 percent falls during the 6-month growing season of April through September. The annual rainfall is subject to considerable variation, the minimum of record being 20.86 inches in 1886, and the maximum prior to 1951 being 59.41 inches in 1927. During January to November 1951, inclusive, the total amount of rainfall was 57.97 inches at Sedalia, 54.27 inches at Clifton City, 57.51 inches at Concordia, and 60.84 inches at Sweet Springs.

6. The Lamine River Basin is subject to frequent floods caused by runoff from intense storms. Floods have occurred every month of the year. The period of most frequent floods is from April through June. At present there are two discharge stations in the basin, one on the Lamine River near Clifton City and the other on the Blackwater River near Blue Lick. These gages were

established in 1922. Flood stage at Clifton City has been exceeded 142 times in 29 years, 1923 to 1951, inclusive; the period of flooding varies from 1 to 5 days and the average flood period is 1.7 days. At Blue Lick on the Blackwater River, during 1923 to 1933, inclusive, and 1938 to 1951, inclusive (25 years), flood stage has been exceeded 89 times. The period of flooding varies from 1 to 12 days and the average flood period is 3.5 days.

7. *Flood damages.*—During 1951, 12 overflows occurred on the Lamine River and 6 overflows occurred in the Blackwater River Basin. The highest overflow on the Lamine River was on June 28, and the crest stage of 32.5 feet at Clifton City was the second highest in 46 years. The maximum stage of record was 35.3 feet on September 18, 1905. The crest stage near Blue Lick on the Blackwater River of 35.1 feet on July 14, was the second highest stage in 23 years. The maximum stage of record 41.2 feet on November 18, 1928.

8. A total of 71,300 acres was inundated by the 1951 floods. Approximately 63,900 acres were utilized for crops and pastures. Damage to crops in the basin totaled $4,907,000. Other agricultural losses, principally land damage, were estimated at $433,000. Approximately 400 farms were affected by the flood. Municipalities were affected indirectly, but the principal nonagricultural loss was damage to the State highways and county roads. The nonagricultural damage was $138,000. The total flood damage in the basin during 1951 was $5,478,000.

9. A summary of the flood damages during 1941 to 1951 is shown in the following tabulation:

Year	*Flood damage*
1941	$474,000
1942	462,000
1943	812,000
1944	790,000
1945	550,000
1946	11,000
1947	763,000
1948	1,094,000
1949	684,000
1950	38,000
1951	5,478,000
Total (11 years)	11,156,000

The average annual damage during 1941 to 1951, inclusive, is $1,014,000.

10. Thousands of acres of bottom land have been made idle by the floods, which occur several times every year. The idle land could be made productive with the construction of flood-control projects, and the crop yields on the present farmland could be greatly increased.

COOS BAY, OREG.

Senator YOUNG. The committee has received a letter from Senator Morse expressing his interest in the Coos Bay project. His letter will be inserted in the record.

(The letter referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
May 2, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Army Civil Functions Subcommittee,
Appropriations Committee, United States Senate,
Washington, D. C.

MY DEAR SENATOR: A number of my constituents in the Coos Bay, Oreg., area written to me expressing their deep concern over the silted-in condition of the bay in the vicinity of Charleston, Oreg. Upon checking into this matter, I note that the Rivers and Harbors Act approved June 30, 1948, authorized the modification of the project for Coos Bay, Oreg., in accordance with the recommendations

of the Chief of Engineers as contained in House Document 646, 80th Congress. That modification provides for a channel 10 feet deep at mean-low water and 150 feet wide from the main channel in Coos Bay to a point 2,000 feet north of the highway bridge at Charleston, a distance of 3,400 feet; a mooring basin 10 feet deep, 500 feet wide, and 900 feet long; and a breakwater 2,100 feet long extending channelward from the west shore in the vicinity of the United States Coast Guard Station.

No funds have been appropriated by Congress with respect to this modification.

Attached are two typical letters, both of which are addressed to me by Mr. Herbert F. Young, secretary of the Empire-Charleston Chamber of Commerce. The statements set forth by Mr. Young express the sentiments of all of the constituents who have written to me with respect to this case.

In view of the seriousness of the existing situation, I would appreciate it very much if at the appropriate time, the subcommittee would give serious consideration to the possibility of appropriating funds sufficient to warrant the undertaking of a reasonable portion of the essential pork on this project.

Sincerely yours,

WAYNE MORSE.

EXCERPT FROM LETTER OF JANUARY 24, 1953, FROM HERBERT F. YOUNG, SECRETARY, EMPIRE-CHARLESTON CHAMBER OF COMMERCE, EMPIRE COOS BAY, OREG., TO SENATOR WAYNE MORSE

The oysterbeds in South Slough are threatened and fish boats handicapped by lack of adequate channel and drainage. In the past much correspondence has been written regarding this subject and I do not wish to tire you by going into all the details.

The United States Army engineers must have a large file on this matter which means so much to fishing interests at Charleston.

It often happens because of the bad channel conditions going into Charleston that even small craft have to lay outside in the main channel for hours waiting for water deep enough to get in and unload their catch.

During the last 2 years to my knowledge the United States Army engineers dredge has conducted dredging operations in the main channel to Coos Bay from the bar and it seems to me that it would be a simple and economical business to have them dredge the small distance from the main channel to Charleston Bridge. Please interest yourself in this important matter.

EXCERPT FROM LETTER OF APRIL 2, 1953, FROM HERBERT F. YOUNG, SECRETARY, EMPIRE-CHARLESTON CHAMBER OF COMMERCE, EMPIRE, COOS BAY, OREG., TO SENATOR MORSE

Enclosed is a news picture taken from the Coos Bay Times of today showing the predicament which numbers of the commercial fishing boats operating out of Charleston find themselves in. Please note the news story of the picture in which it states "The Coast Guard vessel, drawing 3½ feet, touched bottom several times going from Charleston to the Nel-Ron-Dic." Because of these impossible conditions now existing at Charleston the Coast Guard crew, who are considered very efficient, have, in cases of emergency or when they are required to launch their lifesaving boat, to proceed to Charleston, an appreciable distance from their base, and cover almost four times the distance by water which they would not have to do if this silted-in condition did not exist. Please, Senator, if this seems long-drawn-out bear with me but it is a very serious state of affairs and we would be greatly thankful if something could be done about it.

COQUILLE RIVER, OREG.

Senator YOUNG. The committee has also received letters from the port of Bandon and from the Lions Club of Bandon, Oreg., relative to the need for maintenance funds for the Coquille River.

These letters will be made a part of the record.

(The letters referred to follow:)

PORT OF BANDON,
Bandon, Oreg., April 20, 1953.

Hon. WILLIAM F. KNOWLAND,
Senate Office Building,
Washington 25, D. C.

DEAR SENATOR KNOWLAND: We are enclosing copies of all this year's correspondence asking for assistance in the Coquille River Harbor.[1] From memory, through the Olson Steamship Co. I am under the impression that it was through your assistance we got the allotment for emergency funds in 1950 which we supposed at that time was to be used exclusively on the south jetty.

We have been corresponding with Representative Harris Ellsworth from Oregon regarding this matter and he has all the data.

Any assistance you can give will be much appreciated.

Yours very truly,

PORT OF BANDON,
J. E. WALSTROM.

LIONS CLUB,
Bandon, Oreg., April 27, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee,
United States Senate, Washington 25, D. C.

DEAR SIR: We as a Lions Club and as citizens and residents of this area are very much interested in the maintenance of the Coquille River Harbor because a big share of our timber resources are shipped to market by boat.

Please seriously consider the needs of harbor maintenance in the appropriations now coming before the committee in the Senate.

Yours very truly,

M. E. BOAK,
Chairman Civic Improvement Committee.

COLUMBIA AND LOWER WILLAMETTE RIVERS, OREG.

Senator YOUNG. The committee has also received a letter from the Pacific American Tankship Association relative to maintenance of the Columbia and Lower Williamette Rivers, Oreg. That letter will be inserted in the record.

(The letter referred to follows:)

PACIFIC AMERICAN TANKSHIP ASSOCIATION,
San Francisco, Calif., May 14, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Army Civil Function Committee,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: The Pacific American Tankship Association is composed of the following companies, located on the Pacific coast of the United States, owning and operating tankships:

General Petroleum Corp.
Hillcone Steamship Co.
Keystone Shipping Co.
Richfield Oil Corp.
Standard Oil Co. of California
The Texas Co.
Tide Water Associated Oil Co.
Union Oil Co. of California

[1] This correspondence has been filed with the committee.

Because their vessels regularly carry a very substantial volume of petroleum products to Columbia River ports, the member companies are directly and deeply concerned with conditions in the Columbia River.

The existing project which covers the Columbia and lower Willamette Rivers between Portland, Oreg., and the mouth of the Columbia River, and which was authorized by Congress some years ago, provides for a navigation channel 500 feet wide and 35 feet deep at mean lower low water. The tremendous population and industrial expansion of the Pacific Northwest in recent years, and the rapidly increasing importance of the area from the standpoints of national defense and the civilian economy are well known. Despite the vital importance of the above-mentioned waterway to a vast portion of this area, the navigation channel is not being maintained at the authorized depth and width.

We are informed by the United States Army engineers that the following amounts have been expended on maintenance dredging on the Columbia and lower Willamette Rivers project in recent years:

Fiscal year:	*Cost*
1949	$1,404,470.82
1950	1,525,825.17
1951	1,147,207.00
1952	1,071,934.00
1953 (to Jan. 31)	1,207,490.00

These amounts have proven inadequate to do the job authorized by Congress. It has been authoritatively estimated that it would require in excess of $1,800,000 annually to maintain the channel from Portland to Astoria, Oreg. This figure does not include the amount that would be required to restore the channel to the authorized depth and width because of the appropriation of inadequate maintenance funds for the past few years.

The allocation of insufficient funds to maintain the authorized project depth and width for the entire length of the channel has necessitated channel work being done only where the needs were the greatest and has placed the Army engineers and the shipowners in the dilemma of choosing between width and depth. Where channel width has been sacrificed it has created a hazardous situation for vessels and vessel personnel. Passing ships are in danger of getting bank suction and of colliding, and when vessels get off range the slightest bit there is danger of running aground. When the channel depth is not maintained ships' draft has to be limited to 30 feet or less and even then ships have to wait for high tide; this occasions heavy losses in time and in value of cargo shut out. The trend toward larger and deeper draft vessels is a matter of record and this will increase the navigational hazards in the Columbia River if the authorized project depth and width are not maintained.

We respectfully urge your support of the allocation of adequate funds for restoration and continuous maintenance of the existing authorized project covering the Columbia and lower Willamette Rivers from Portland, Oreg., to the sea.

Very truly yours,

PACIFIC AMERICAN TANKSHIP ASSOCIATION,
By J. B. STENE, *President*.

MAINTENANCE FUNDS, COQUILLE, OREG.

Senator YOUNG. The committee is in receipt of a letter from the Shipowners' Association of the Pacific Coast relative maintenance funds for the harbors of Reedsport, Newport, and Bandon, Oreg. That letter will be made a part of the record.

(The letter referred to follows:)

SHIPOWNERS' ASSOCIATION OF THE PACIFIC COAST,
San Francisco, Calif., April 6, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee,
United States Senate,
Washington D. C.

MY DEAR SENATOR: We enclose copy of letter from the United States Army engineer at Portland, Oreg., as to their proposed work at the harbors of Reedsport, Newport, and Bandon, all in Oregon.

We are pleased with the work they anticipate doing to deepen these bars, but the fact that they mention in the last paragraph on page 1, that curtailment of work anticipated may have to be made if appropriate funds to accomplish are not forthcoming.

Our member companies operate out of these ports and it is highly eessential that if sufficient appropriations are not already earmarked to accomplish this that your committee give consideration for this work as these ports furnish much lumber that is carried by our member companies and we feel that full consideration should be given that vessels may enter and depart without delay.

We are currently overburdened with high operating costs and to be delayed account insufficient water at the bars greatly increases vessels expenses, as our expenses go on the same as if vessel was under way and proceeding to destination.

Your assistance in this matter will be greatly appreciated in seeing that sufficient funds are allocated for this work.

Yours very truly,

R. W. MYERS, *President.*

CORPS OF ENGINEERS, UNITED STATES ARMY,
OFFICE OF THE DIVISION ENGINEERS, NORTH PACIFIC DIVISION,
Portland, Oreg., March 31, 1953.

Mr. R. W. MYERS,
President, Shipowners' Association of the Pacific Coast,
San Francisco, Calif.

DEAR MR. MYERS: I wish to acknowledge your letter of March 20, 1953, making inquiry of our dredging program at the ports of Bandon, Reedsport, and Newport, Oreg.

Since July 1952, to date, the following amounts have been dredged as indicated:

Bandon (Coquille River), 29,830 cubic yards.
Reedsport (Umpqua River Bar), 182,800 cubic yards.
Reedsport (Umpqua River inner channel, 526,970 cubic yards.

No work has been accomplished at Newport (Yaquina Bay and Harbor) since July 1, 1952. However, our dredging schedule at present is arranged so that the dredge Pacific will work on that project during the entire month of June 1953. It is expected that approximately 225,000 cubic yards will be removed during the month restoring the entrance channel to 26-foot project depth.

Beginning July 1, 1953, the dredge Pacific is scheduled to begin operations on the Umpqua River project remaining there until July 31 when on the dredge is scheduled to move to the Coquille River project to work during the month of August. It is expected that, under average conditions, more than 200,000 cubic yards will be removed from each of these projects, restoring the entrance at the Umpqua River to 26 foot project depth and Coquille River 13 foot project depth.

After August 1953 the dredge will move to other projects and will not return to the Umpqua River project until May 1, 1954 and moving on to the Yaquina Bay and Harbor project in June 1, 1954. It is expected that something in excess of 200,000 cubic yards will again be removed from each of the projects during each of the months of operation.

The above schedules are, of course, subject to revision for various reasons, among them being whether or not Congress appropriates funds in the amounts necessary to accomplish all of the work required in this division. Any change in the amount of funds necessarily requires different scheduling of the dredges.

You may be assured that we will make every effort to maintain these projects to the fullest extent possible under whatever conditions and circumstances exist. Please feel free to call upon me for any further information you may desire

Very truly yours.

E. C ITSCHNER,
Colonel, Corps of Engineers, Division Engineer.

EAGLE GORGE, WASH.

Senator YOUNG. The committee has received a letter from Senator Magnuson supplementing his previous statement on the Eagle Gorge project. His letter will be inserted in the record at this point.

(The letter referred to follows:)

UNITED STATES SENATE, COMMITTEE ON APPROPRIATIONS,
May 22, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Civil Functions Appropriations,
United States Senate.

DEAR SENATOR: I am just cleaning up a number of last minute items before leaving on the Far East assignment. Among other things I have just read the testimony presented on the Eagle Gorge flood-control project. It is not quite clear from the record just what we have in mind—hence, this supplementary statement.

Colonel Hanson testified that an expenditure of $300,000 will complete planning on Eagle Gorge Dam. We understand the engineers have included $100,000 for this purpose in their fiscal 1954 planning fund request. This would leave $200,000 still needed for planning. In addition, Colonel Hanson—after consultation with the engineers testified that the corps could use efficiently around $450,000 of construction funds in fiscal 1954.

He and others stated the fact that we have $2 million of local funds that will become available to the engineers immediately the Congress makes an appropriation of funds for construction. What we propose, therefore, is that your committee approve the $100,000 of planning funds already in the budget and in addition give us a small amount of—say $100,000–$200,000 for construction.

Since the $2 million we have can be used both for planning and construction, we would utilize $200,000 of this local money to make up the $300,000 required to complete planning and estimates, and would add to whatever construction moneys you provide enough money from the local source to make $450,000 in that category. Thus, with a minimum outlay of Federal money, we could get this vital project into construction in this fiscal year.

I am attaching a paragraph which Colonel Hanson requested be inserted in his testimony, clarifying this use. We have already put the paragraph in the hands of the committee clerk, so no further action in this regard is required. I am merely passing this along to you for your information.

Kindest regards.

Sincerely,

WARREN G. MAGNUSON,
United States Senator.

Senator YOUNG. This will close the hearings, then, so far as outside witnesses are concerned. I understand that the Corps of Engineers will appear tomorrow.

We will recess until 2 o'clock tomorrow afternoon.

(Whereupon at 4:20 p. m. Monday, May 25, 1953 the committee recessed, to reconvene at 2 p. m. on Tuesday, May 26, 1953.)

CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY APPROPRIATIONS FOR 1954

TUESDAY, MAY 26, 1953

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 2 p. m., in room F–39, the Capitol, Hon. William F. Knowland (chairman of the subcommittee) presiding.

Present: Senators Knowland and Ellender.

CIVIL FUNCTIONS

ADVANCE PLANNING

STATEMENT OF BRIG. GEN. CLAUDE H. CHORPENING, ASSISTANT CHIEF OF ENGINEERS FOR CIVIL WORKS, ACCOMPANIED BY COL. WRIGHT HIATT; LT. COL. EARL C. PAULES; COL. WILLIAM D. MILNE; HARRY COHEN, AND A. J. SMET, OFFICE OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY

PROJECT BACKLOG AND UNEXPENDED BALANCES

Senator KNOWLAND. The committee will come to order.

General, will you furnish a table for the committee showing for the last 4 years the expenditures for planning, including your best estimate for the current fiscal year and the unexpended balance on June 30, 1953. Also the backlog of the projects on which you have expended some planning funds. How many of these projects are sufficiently planned that under the present criteria you would feel justified in requesting construction funds and what is the total estimated cost of these projects?

General CHORPENING. I have that information here, sir.

Senator KNOWLAND. I will just insert that in the record so that the subcommittee can see the overall picture.

(The information referred to follows:)

BACKLOG OF PROJECTS IN PLANNING STAGE

Of the projects which have not yet received construction appropriations, some planning work has been accomplished on approximately 200, the cost of which are estimated at $4,483,000,000. Planning on 29 projects of this group has reached the stage where a recommendation for construction funds would be justified on the basis of meeting the following criteria:

(1) Planning has advanced to the stage where the design, scope, and extent of major structures has been determined and firm estimates of cost are available.

(2) There is reasonable assurance that local interests will promptly furnish all requirements of local cooperation.

(3) The project will provide a significant contribution to defense or essential civilian need; is required as an emergency rehabilitation; or will bring about a balance between the various water-resource development programs in the area.

The 29 projects are broken down as follows:

Type of project	Number	Total estimated cost
Navigation	10	$182,073,500
Flood control	15	165,477,300
Multiple purpose	4	449,681,900
Total	29	797,232,700

Although these projects are ready for initiation of construction, they have not been fully planned, and only portions of these projects could be constructed without the additional planning work scheduled to be accomplished during the construction period.

The above figures do not include dredging projects on which planning would not be required.

Expenditures for planning

Fiscal year:	*Amount expended*
1949	$5,969,100
1950	4,780,700
1951	3,917,800
1952	3,247,400
1953 (estimated)	4,580,000

It is estimated that the unexpended balance of planning funds on June 30, 1953, will be $1,301,000 and that the unobligated balance will amount to $1,053,450.

EXPLANATION OF STATEMENT

Senator KNOWLAND. General, do you want to proceed with the discussion of the planning item?

General CHORPENING. I would like to make one statement in connection with the information that the chairman has just read.

I believe that the committee appreciates that on those 29 projects we have accomplished only that planning which we normally do prior to going into construction and that other planning is always done as we go along with the construction of the projects. I did not know whether that was completely clear with the committee.

Senator ELLENDER. As a matter of fact, you do not complete your planning in but a few instances, in fact, there are few where you have done that. As a matter of fact, your planning goes on as you build.

General CHORPENING. That is correct, sir. Only on the very simple projects do we with planning money completely determine the engineering features and details. On most projects the details are worked out as we go along with the project.

Senator ELLENDER. In the planning of these 29 projects you are able to tell this committee what is the expected cost?

General CHORPENING. That was included in the statement, sir, each group in detail and the total.

Senator ELLENDER. Thank you.

BUDGET BUREAU LIMITATION

General CHORPENING. In the approved budget is an item for $3 million for planning in fiscal 1954. The instructions of the Director of the Budget were that those funds would be allocated to not to exceed 35 projects of recognized high priority. We have done that to the best of our ability and we have included in the justification sheets before the committee those projects and the amounts that we would propose to allot these planning funds to.

Senator KNOWLAND. You not only had a dollar limitation of $3 million plus I assume your carryover, or is $3 million to your carryover?

General CHORPENING. No, sir; the carryover has already been allotted to other projects. The $3 million is allocated to the 35 projects.

Senator KNOWLAND. So you have a limitation of $3 million total dollarwise, but you also have a provision that this $3 million must be spent on not to exceed 35?

General CHORPENING. Yes, sir.

Senator ELLENDER. Of your own selection?

General CHORPENING. Yes, sir.

Senator KNOWLAND. In other words, if you had 70 projects which would happen to meet the general criteria, maybe they would be smaller projects in order to come out more or less even on your $3 million, you would have to select those 35 in effect which would make up $3 million?

METHOD OF PROJECT SELECTION

General CHORPENING. That is right. It is a matter of selection under the criteria. Thirty-five was all that we could include and we had to apply our best judgment to determine the projects that met the criteria and the amounts to apply to each so that we could most profitably utilize the amount of funds that added up to the $3 million.

Senator KNOWLAND. I understand you are having $3 million limitation. I do not know that I fully agree that out of that $3 million as long as you did not exceed that you could not take more than 35 projects. I think it might be conceivable that you could select 40 projects and still be within the $3 million. It is a kind of double-barreled restriction.

Senator ELLENDER. On the other hand, they have to have such high priority that your smaller projects would have no chance. Some of these smaller projects would be perhaps very necessary and vital to a community but may not be nationwide in importance.

General CHORPENING. We have included some relatively small projects in the 35. For instance, Barbourville which was discussed yesterday before the committee. That is a small project as projects go.

Batavia, N. Y.; Dansville, N. Y.; Bradford, Pa.; Johnsonburg, Pa.; we have included quite a few of the smaller projects in making up our list of 35.

Senator ELLENDER. How about projects for which planning money has already been spent?

General CHORPENING. I think not all but most of these projects, Senator, have already had some allocations of planning funds, but not enough to get us to the point where we are in a position to come to the Congress for construction funds if the criteria permitted.

Senator ELLENDER. Let us be specific. One that I know of in my own State, the Overton Canal, you have already spent some planning money on that. I do not remember the amount at the moment. But would you be precluded from spending any additional money on that because of this 35 limitation that you have there?

General CHORPENING. We would be precluded unless: (1) We had asked for that particular one and had it approved, or (2) unless the Congress told us that they wanted it.

Senator ELLENDER. Even though you started the planning?

General CHORPENING. That is correct. You see, we started planning on quite a few. As the statement indicated, we have expended some planning funds nationwide on about 200 projects, and in some instances that planning was done some years ago and has not been picked up. For the last 3 years we have been under different criteria for planning than we were prior to that time.

Senator ELLENDER. On that particular project I notice here that the amount appropriated to date on planning was $189,800. Here is one that may be almost ready to go and yet you cast it aside and start on another, a brand new one.

SELECTION AS TO RECOGNIZED HIGH PRIORITY

General CHORPENING. We have to make the interpretation as to recognized high priority. It was our interpretation that more planning funds could not be included on the project at this time.

Senator KNOWLAND. I wonder if you could give us an indication on these projects that are included on the planning, what the benefit-cost ratio is.

General CHORPENING. We have that. Would you want me to recite each one, sir, or would you like it to be placed in the record?

Senator KNOWLAND. I think it might be placed in the record.

General CHORPENING. I will make this as a general statement, Mr. Chairman, that the benefit-cost ratio generally is quite favorable. I may say that we have tables which were presented in the House and we could present the same tables here which give for each project quite a considerable amount of data on the original cost, the present estimated cost, and considerable justification data.

Senator KNOWLAND. I think that might be included in the record.

(The information referred to follows:)

Data on planning projects in 1954 budget

NAVIGATION

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
						Type	Percent				
ALABAMA											
Jackson lock and dam.	River and Harbor Act, Mar. 3, 1909.	$28,546,000	$28,546,000	$40,000	1.25	Navigation	100	.....	0	.....	Replacement for 3 locks and dams on the Tombigbee-Warrior Waterway. It will reduce multiple lockages, travel time, and transportation costs. Waterway is vital to the movement of iron ore to Birmingham and steel products from Birmingham.
ILLINOIS											
Illinois Waterway, Calumet-Sag Channel.	1946 and prior river and harbor acts.	46,900,000	109,344,500	100,000	2.2	do	100	.....	31	.....	This project connects the Great Lakes with the Mississippi River system. Industrial expansion in the area is demanding expansion in transportation facilities. Commerce on waterway is increasing despite limiting facilities. Anticipate trebling commerce with the project modification.
INDIANA											
Markland locks and dam.	River and Harbor Act, Mar. 3, 1909.	41,000,000	74,600,000	120,000	1.33	do	100	.....	28	$111,137	This project will replace 5 locks on the Ohio River. Waterway traffic in this section is the second densest on the Ohio River. Lock No. 37, one of those to be replaced, was built in 1911, has deteriorated to such an extent that failure is a threat. Movements of coal and other commodities in this area are essential to defense industries.
KENTUCKY											
Greenup locks and dam.	do	40,000,000	64,980,000	100,000	1.13	do	100	.....	20	114,617	This project will replace inadequate low-lift structures on the Ohio River and lock and dam No. 1 on Big Sandy River. Millions of tons of petroleum products, steel products, and other essential defense material are transported on the Ohio River.

See footnotes at end of table, p. 1953.

Data on planning projects in 1954 budget—Continued

NAVIGATION—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
						Type	Percent				
LOUISIANA											
Plaquemine-Morgan City alternate route.	Rivers and Harbors Act, July 24, 1946.	$8,000,000	$24,350,000	$50,000	1.18	Navigation	100		28	$16,543	Benefits to the national economy will result from relief of water-traffic congestion at New Orleans, acceleration of shipping schedules, and elimination of possibility of a rail network tie-up in time of emergency as would be the case if lock facilities at New Orleans were damaged.
WEST VIRGINIA											
Hildebrand lock and dam.	Rivers and Harbor Act, May 17, 1950.	13,094,000	15,745,000	45,000	1.72	do	100		38	14,844	This project will replace locks 12 and 13 on the Monongahela River, which have reached the end of their useful life and have become uneconomical and impractical to maintain. Increased commerce on the river has accentuated the inadequacy and obsolescence of the existing facilities. This commerce is essential to defense industries.

ARIZONA											
Painted Rock Reservoir.	1950 Flood Control Act.	25,800,000	28,960,000	160,000	1.15	Flood control.	100		17		The construction of Painted Rock Reservoir would provide protection under average future conditions for 167,000 acres of cultivated lands and improvements. The developed area is mostly agricultural and includes extensive irrigation works, 2 long highway bridges and 1 railroad bridge. The total value of the overflow area is estimated at $125,000,000. In addition to the justified needs for flood control, the project is vital to the operation of the 1944 Water Treaty with Mexico; and the Bureau of Reclamation has raised and strengthened levees on the assumption that Painted Rock Reservoir would be constructed.
CALIFORNIA											
ervoir.	do	11,522,000	14,774,000	100,000	2.17	do Water supply. Recreation	20 29 51		41		The flood plain of the Russian River is predominately an agricultural area, and is an important source of food supply for the San Francisco-Oakland metropolitan area. Portions of the city of Healdsburg, the town of Guerneville, and a number of summer resort areas are also subject to inundation during major floods. A total of 29,500 acres of land were flooded in February 1940 with estimated direct and indirect damages at about $2,900,000. The authorized project, when constructed, will alleviate damages due to floods and permit full agricultural and industrial production in an area relatively near to the strategic San Francisco-Oakland metropolitan area. In addition, the supplemental water which will be made available incidental to flood-control operation of the reservoir will be used to meet present and future domestic water demands at Santa Rosa, Petaluma, Sonoma, and adjoining areas; to augment existing water supplies for agricultural purposes; and to maintain a minimum flow of 200 cubic feet per second at Guerneville and other resorts on the river during the summer months for recreational purposes.

See footnotes at end of table, p. 1953.

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Data on planning projects in 1954 budget—Continued

FLOOD CONTROL—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal[1] year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
						Type	Percent				
CALIFORNIA—con.											
San Antonio and Chino Creeks.	1938 Flood Control Act.	$9,000,000	$11,340,000	$85,000	1.03	Flood control	100	.....	24	.....	This project is a necessary adjunct to the San Antonio Reservoir which under the President's curtailment order for fiscal year 1951, was the only new project on which construction was allowed to be initiated, this being based on its value to the national defense. The dam and channel are coordinate parts of a flood-control project, each part being essential to the satisfactory operation of the other. Unless the channel is constructed in coordination with the dam, damage by driftage from the inadequate flood-protection improvement and undermining of bridge piers and abutments would cut all highway and railroad routes between Los Angeles and the east. 3 transcontinental railroads and 1 interconnecting carrier cross San Antonio Creek and are affected by its floods. They are the Union Pacific, Santa Fe, and Southern Pacific RR. and the Pacific Electric. Normal daily traffic consists of 4,000 freight cars and 435 passenger cars. 80 percent of the total east-west traffic from Los Angeles moves across San Antonio Creek. In the flooded area and subject to isolation, damage and shut down from San Antonio floods are 20 industrial plants including a $60,000,000 guided missile plant now under construction, and the Pomona pump works employing over 400 people. Other improvements important to national defense crossing the channel and flood plain include several strategic major highways, the high tension

											electric transmission line from Hoover Dam to Los Angeles, and a similar line from Hoover Dam to San Diego which is now under construction. Any interruption to either highway or railroad transportation would adversely affect Kaiser steel mill (Fontana plant) only a few miles east.
San Joaquin River and tributaries.	1944 Flood Control Act.	2, 875, 000	5, 232, 000	25, 000	(2)	....do.....	100	.....	57	$16, 500	The levee and channel improvement project, together with reservoir units, will provide flood protection to a rich agricultural area of approximately 140,000 acres; to numerous commercial and public installations and a suburban area south of the city of Stockton. There are also several important military installations in the area subject to flooding, including the Sharpe General Depot near Lathrop with annexes in Stockton and at Stockton Field. Damages in excess of $4,500,000 were suffered during the 1950 flood in an area along the San Joaquin River below the mouth of the Merced River. During the 1952 flood, damages amounting to $320,000 would have been prevented by the project.
DISTRICT OF COLUMBIA											
Anacostia River, D. C. and Md.	1950 Flood Control Act.	4, 531, 200	7, 553, 000	175, 000	1. 55	Flood control Navigation Recreation Other	53 27 −15 5	.....	26	9, 800	Construction of the project will provide protection from frequent floods to an important section of the Washington metropolitan area and will insure uninterrupted transportation to and from the Capitol. Highway routes U. S. 1 and U. S. 50 at their Peace Cross junction are flooded on an average of 6 times annually, interrupting traffic to and from Washington and on Defense Highway. Transportation at this point was interrupted for a total of 29 days during fiscal year 1951 and 26 days in fiscal year 1952. During these periods, Government and commercial activities in the area were interrupted. Such interruption in the event necessity for evacuation of the city should arise would prove disastrous, especially if the bridges to Maryland on the lower Anacostia River should become unusable.

See footnotes at end of table, p. 1953.

Data on planning projects in 1954 budget—Continued

FLOOD CONTROL—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
						Type	Percent				
IDAHO											
Columbia River local protection, Idaho, Oregon, Washington, Utah, Nevada, and Montana.	1950 Flood Control Act.	$15,000,000	$15,000,000	$125,000	(3)	Flood control					*Portneuf River and Marsh Creek unit.*—This unit of the project will provide protection against flood damage to urban and suburban areas of Pocatello and to agricultural lands along portions of Portneuf River and Marsh Creek. In Pocatello the levee and channelization plan would protect commercial, industrial, and residential areas and municipal improvements. The project would alleviate the almost annual threat of flood damage, including possible loss of life, during the spring snow-melt flood season, reduce the expenses of flood-fighting activities, and reduce the economic loss which results from interruption of normal activities. *Grande Ronde Valley unit.*—About 72,000 acres of improved valley lands in the main Grande Ronde Valley are subject to damage by major floods of Grande Ronde River and its tributaries including Catherine and Willow Creeks which enter the valley. The work proposed would prevent flood overflow of approximately 51,000 acres, and greatly reduce the frequency of flooding of remaining land. The project would also protect the cities of La Grande and Union, alleviate the threat of damage to and interruption of traffic over U. S. 30, numerous roads, the main line of the Union Pacific Railroad to the Pacific Northwest, and a branch line of the Union Pacific Railroad.

ILLINOIS											
Beardstown	do	2,976,000	3,453,000	30,000	1.42	do	100		43		The entire city of Beardstown with a population of 6,080 and the adjacent lands are subject to flooding. Extensive flood damages were suffered in 1922, 1926, 1927, and 1943. The average annual damages are estimated at $280,500. Approximately 15,000 acres of productive agricultural lands, several highways and railroads, and a number of industries, including a flour mill, are within the area subject to floods. This project will provide protection to urban property and crops and will prevent interruption of communication and transportation facilities.
INDIANA											
Mansfield Reservoir	1938 Flood Control Act.	1,895,000	5,230,000	30,000	1.33	do Other	83 17		10	$2,800	The Mansfield Reservoir project is 1 of 80 authorized reservoir units for control of floods on the Ohio River and tributary streams. Only 2 reservoirs are authorized for construction in the Wabash River Basin, 1 of the large contributors to floods on the Ohio River. The operation of the reservoir will reduce flood stages along Raccoon Creek below the dam and contribute toward reduction of flood flows along the Wabash and Ohio Rivers. Raccoon Creek, on which the reservoir is situated, enters the Wabash River at mile 238 above a section of the stream in which many levee units are located. The operation of the reservoir will increase the degree of protection afforded by the levee units, most of which were originally constructed by the landowners protected thereby. In addition, flood stages will be reduced along unprotected areas which will lessen the average annual damages being sustained under present conditions.
KENTUCKY											
Barbourville	1950 Flood Control Act.	1,765,000	2,090,000	75,000	1.26	Flood control.	100		14		The project is located in an important coal-producing area. The city lies in a comparatively level and broad flood plain which was almost entirely inundated by the 1946 flood. The town has experienced damaging floods annually with damages amounting to $310,300 for the 1951 flood alone. The proposed works will promote the health and safety of the residents, provide economical stability to the community and industry, and prevent interruption in the employment of inhabitants in coal-producing activities.

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Data on planning projects in 1954 budget—Continued

FLOOD CONTROL—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
						Type	Percent				
KENTUCKY—con.											
Rough River Reservoir and channels.	1938 and 1944 Flood Control Acts.	$5,042,000	$8,409,000	$27,000	2.3	Flood control. Other	94 6	.....	32	.....	The Rough River Reservoir is 1 of 80 authorized reservoir units proposed as a means of controlling floods on the Ohio River and its tributary streams. The operation of the reservoir for flood control will reduce flood stages along the Rough River below the dam, and in combination with the other 4 authorized reservoir units of Green River Basin will reduce flood stages on the Green and Ohio Rivers. The reservoir when in operation will control 42 percent of Rough River drainage area of 1,080 square miles. Under the comprehensive plan for flood protection in the Ohio River Basin, consisting of a system of reservoirs for flood control and local protection projects for heavy damage centers, all reservoir units of the plan must be completed before the ultimate benefits can be derived. The early construction of this project will be the initial step in the progressive development of flood control and related water uses for the Green River Basin. Included in the plan are channel improvements on Rough River, Barnett Creek, and North Fork to reduce flooding of agricultural lands along these streams.
NEW MEXICO											
Chamita Reservoir.	1948 and 1950 Flood Control Acts.	30,833,000	36,406,000	175,000	1.22	Flood control.	100	[3]15,000	32	$101,100	This project is one of the primary flood and sediment control units in the plan of improvement for the Rio Grande Valley. The project will reduce the flood hazard to the city of Albuquerque, N. Mex. In the past few years Albuquerque, N. Mex., has become

NEW YORK										
Batavia	1948 Flood Control Act.	565,000	728,000	20,000	2.6	do	100		63	The project will reduce flood stages in the city of Batavia and will eliminate about 87 percent of the average annual flood damages. The flood of March 1942 inundated 640 acres and caused damages of $462,000 at present-day price levels. The flooded area included residential, industrial, and commercial sections. Utility services were interrupted in a larger area. The project is necessary to prevent interruption to production at 2 plants of the Doehler Die Casting Co., which supplies parts to several defense industries and to prevent delays to traffic on State Highways Nos. 5 and 32, which carry heavy, through commercial traffic. It will also prevent interruption of utility services to residents of Batavia.
Dansville	do	165,000	212,000	18,000	1.09	do	100			The project will protect industrial, residential, and agricultural areas at Cummingsville from damage in floods equal to the maximum of record. The assessed valuation of the area to be protected is nearly $1,500,000. The project will also avert a potential health hazard by protecting the sewage treatment plant against damage by bank erosion. The project will also provide protection for the plant of the Foster-Wheeler Corp. at Cummingsville. This plant produces power plant and oil refinery equipment and marine boilers, all of which are of value to national defense.

See footnotes at end of table, p. 1953.

the center of the greatest national defense areas in the United States. 2 Atomic Energy Commission installations, the Los Alamos Scientific Laboratory and the special weapons project at Sandia Base, and the Kirtland Air Force Base would be vitally affected by floods on the Rio Grande because of their dependence on the rail transportation facilities of Albuquerque. Public utilities, such as water, electric power, gas, and sewage disposal for Kirtland Base and Sandia Base are all linked into the city system. Any flood which interrupted service of these utilities would likewise seriously interrupt service at these installations.

Data on planning projects in 1954 budget—Continued

FLOOD CONTROL—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation, contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
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OREGON											
Lower Columbia River, improvement to existing works: Multnomah Drainage District unit.	1950 Flood Control Act.	$1,365,000	$1,758,900	$25,000	1.44	Flood control	100				The Multnomah County Drainage District is essentially a suburban agricultural area with approximately 4,635 acres of highly developed farmland. Throughout the district there are several valuable land developments utilized for various purposes. The most important of these developments is the Portland International Airport which, together with the active military air base, covers approximately 1,500 acres near the west end of the district and is valued at $10,000,000. The airport serves all the western airlines and transoceanic flights, in addition to being used as a training and flight base for military aircraft. Industry is represented by several small, but active, enterprises, the most important being in the food-processing and construction fields. The total value of the district is conservatively estimated at $30,000,000.
PENNSYLVANIA											
Allegheny River Reservoir.	1936, 1938, and 1941 Flood Control Acts.	35,700,000	84,798,000	75,000	1.25	do	100		8	$2,200	The Allegheny River Reservoir project is a unit of the comprehensive plan for Ohio River Basin flood control and is a key unit in the reservoir system for the protection of the Allegheny Valley, metropolitan area of Pittsburgh, and the upper Ohio River Valley. It will afford a substantial degree of flood protection for these extensively developed and heavily populated areas. The reservoir would have the additional function of discharge regulation which would be invaluable for industrial and domestic water

											supply and pollution abatement. Discharge regulation would prevent ice gorges during the winter season and would be an aid to navigation during the summer low-water season. It would protect Warren, Pa., against the maximum flood of record, and in conjunction with the existing Tionesta Reservoir would practically eliminate Allegheny River floods at Oil City and Franklin, Pa. It would provide additional flood protection to the highly industrialized Pittsburgh area and a measure of additional flood protection to the Ohio River Valley which is also highly industrialized. The project would reduce a flood of the magnitude of the March 1913 flood approximately 2.7 feet at Pittsburgh, Pa.
Allentown	1946 Flood Control Act.	741,000	1,823,000	45,000	[6]1.19	do	100		39	42,500	The benefits provided by the local protective works at Allentown would all accrue within the city limits where an area of 350 acres was flooded in 1942. The major part of this area (about 80 percent) is occupied by commercial and industrial establishments, the balance by utilities and residences. Within the area there are 30 large industries, 50 small business establishments, 200 residences, and 5 hotels. Industries within the flood plain include Mack Truck, Allentown Iron Works, Aldrich Pump Co., Arbogast & Bastian, Inc. (meat packers), and Phoenix Silk Co. (uniform makers). Other industries in the surrounding area, engaged in defense work, are also affected by disruption of railroad and highway facilities in the flooded area.
Bradford	1950 Flood Control Act.	6,467,000	8,284,000	20,000	1.10	do	100		16		The project is a local flood protection improvement for Bradford, Pa. Bradford is the main business center of the surrounding area and has long been known for its importance in producing oil, oil refining, manufacturing, trade, and transportation. The 1947 flood affected 27 industrial, 350 commercial, 1,350 residential, 14 churches and other properties in Bradford and the valley downstream to Foster Brook. 1 death was attributed to this flood and 13 persons suffered injury or shock. The construction of this project at the earliest date practicable is considered necessary in order to prevent future disruptions of the industry and commerce of the area and to prevent the recurrence of large flood losses.

See footnotes at end of table, p. 1953.

Data on planning projects in 1954 budget—Continued

FLOOD CONTROL—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
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PENNSYLVANIA—continued											
Johnsonburg	1944 Flood Control Act.	$213,400	$583,000	$30,000	3.06	Flood control	100	.....	41	$3,200	The plan of protection for the Johnsonburg project including the unincorporated community of Rolfe would afford flood protection with a 4-foot freeboard against a flood equal in stage to the maximum flood of record (July 1942). Johnsonburg is the main business and manufacturing center of the surrounding area; its principal industry is the manufacturing of paper. Rolfe is principally a residential section. Most of the population of the 2 adjacent boroughs is affected either directly or indirectly by floods. Early construction of this project is advisable in order to provide a high degree of flood protection for large residential and business areas, the industrial area, 2 railroads, various public utilities and municipal properties.
VERMONT											
Victory Reservoir	1936, 1938, and 1941 Flood Control Acts.	1,415,000	4,165,000	70,000	2.7	Flood control Water conservation.	13 87	.....	42	23,200	The Victory Dam and Reservoir will afford partial flood protection for Concord, St. Johnbury, Waterford, and Barnet, Vt., on the Moose and Passumpsic Rivers. The record flood of 1927 on these tributaries of the Connecticut River inundated an area below the project that now contains 8 industrial plants, 100 homes, 23 commercial establishments, 22 farms, 3 power plants, 2 railroads, and several highways. The project will contribute to the reduction of flood heights at important damage centers and agricultural areas along the Connecticut River below the mouth of the Passumpsic River. The project will also provide important low water regulation and

											water conservation. The regulation afforded by the conservation storage will increase the minimum flow at existing downstream hydroelectric power developments and thereby increase their firm capacity by about 20,000 kilowatts and their annual output by 14,000,000 kilowatt-hours. The regulated flow will also tend to reduce stream pollution by affording increased dilution during periods of low flow. Further engineering and design studies will be made to determine the most desirable method of operating the available storage and the effect of regulation on existing downstream plants.
WASHINGTON											
Eagle Gorge Reservoir.	1950 Flood Control Act.	16,300,000	17,880,000	100,000	1.21	Flood control.	100	----------	43	----------	The project will provide a high degree of flood protection to approximately 17,000 acres of valley lands starting in the vicinity of Auburn and extending north to Renton and Seattle. In the past 50 years there has been at least 26 floods which have flooded the valley lands. The project is necessary for the normal continued economic development of the Seattle area. In addition to providing a high degree of flood protection in the Green River Valley, the project will permit improved agricultural practices, prevent disruption of highway and railroad transportation, and will allow expansion of industry into the upstream valley. Water storage in the reservoir during the nonflood season for later use in the dry summer season to augment low flows will benefit fish life and domestic water supplies and will provide the means for possible irrigation of agricultural lands
MULTIPLE-PURPOSE INCLUDING POWER											
ALABAMA											
Fort Gaines lock and dam.	River and Harbor Act, July 24, 1946.	(6)	$82,793,000	$140,000	1.24	Flood control. Navigation.... Power..... Other.....	1.6 14.4 83.5 .5	130,000	9	$26,285	In addition to providing more economical transportation on the Chattahoochee River, this project will provide a large block of hydroelectric power in an area where it is urgently needed. The project will exert a beneficial influence on the economic structure of the area.

See footnotes at end of table, p. 1953.

Data on planning projects in 1954 budget—Continued

MULTIPLE-PURPOSE INCLUDING POWER—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
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GEORGIA											
Hartwell Reservoir.	1944 Flood Control Act.	$68,377,000	$86,206,400	$130,000	1.63	Flood control. Navigation.... Power.....	0.9 1.6 97.5	300,000	40	$194,008	The Hartwell project is located in the Savannah River Basin. Power such as will be developed by the Hartwell project is urgently needed for the rapidly expanding industries in the Southeast. Recent surveys of the Federal Power Commission and the Southeastern Power Administration indicated that the normal power requirements in North Carolina, South Carolina, and Georgia during the next decade will greatly exceed the supply of power unless additional plants are built. The demand will be even greater because of the additional load placed upon industry in the mobilization effort, particularly as the Atomic Energy Commission Plant along the Savannah River is being built in the same general area. The Hartwell project will improve power generation at the Clark Hill Reservoir by storing the flood flows and releasing more water during low flow periods. This will benefit the Clark Hill project by increasing the prime capacity and by converting annually a large amount of energy from secondary to prime energy, thereby increasing the annual power value. The operation of the Hartwell project will assure a depth of 8 feet all year round in the present river channel between Savannah and Augusta, an increase of about 1 foot over that which can be assured by Clark Hill alone. The increased flow from Hartwell in low flow seasons will reduce the cost of providing a 9-foot navigation project to Augusta, recently authorized by Congress, and the annual maintenance will be reduced. Also, the coordinated operations of Hartwell and Clark Hill Reservoirs will eliminate

frequent floods over a vast area of undeveloped valley land is below Augusta. These

											frequent floods over a vast area of undeveloped valley lands below Augusta. These lands are among the most fertile in the southeastern United States and could be very productive. During a period of national emergency they would produce substantial added farm products. After construction of Hartwell, flooding which now occurs several times annually will be reduced to a frequency of once in 10 years.
MONTANA											
Fort Peck Dam (second powerplant).	Rivers and Harbors Act, May 18, 1938.	21,000,000	21,630,000	250,000	1.71	do	100.0	80,000	3.8		The hydroelectric plant at Fort Peck is connected to the Northwest power pool, and is used to mitigate the power shortage in this pool during peak load periods. During World War II, full generating capacity of the existing plant was furnished to the Northwest power pool, which serves extensive copper and aluminum refining industries, numerous other factories, electric railroads, and towns and extensive highly developed agricultural areas.
Libby Reservoir	1950 Flood Control Act.	239,077,000	284,336,000	150,000	2.03	do Flood control	93.0 7.0	660,000	7	125,000	The demand for power in the Pacific Northwest to expand and stabilize operation of industries essential to national defense is very urgent. The Libby Reservoir, considered as operating in the present Federal system of power generating plants consisting of Bonneville and Grand Coulee, already in operation, Hungry Horse, Albeni Falls, Chief Joseph, McNary, and The Dalles, now under construction, would add approximately 1,080,000 kilowatts of average continuous power, of which 364,000 kilowatts would be at site and the remaining 716,000 kilowatts downstream in the United States. Water stored in Libby Reservoir will be usable for generating power through 994 feet of head at downstream plants in the United States, and 345 feet of head at downstream plants on the Kootenai River in Canada. In addition to very important blocks of power that would be developed by the Libby project, normal storage and power operation will provide complete flood control for the highly developed agricultural area of 30,000 acres in the Kootenai Flats and will significantly decrease flood heights in the lower Columbia River. Water stored during high spring flows and released from Libby during low flow will also increase the depth of water in the lower Columbia River Channel for navigation purposes.

See footnotes at end of table, p. 1953.

Data on planning projects in 1954 budget—Continued

MULTIPLE-PURPOSE INCLUDING POWER—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits		Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
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OKLAHOMA											
Keystone Reservoir.	1950 Flood Control Act.	$89,500,000	$127,684,000	$100,000	1.39	Flood control Power Navigation Other	32 22 42 4	60,000	58	$79,800	Keystone Reservoir will become a key project in the system when operated in conjunction with other authorized reservoirs in the Arkansas River Basin. Large flood losses were sustained in the Arkansas River Valley in May 1943, April 1945, and June 1948. Flood damages resulting from the major flood of 1943 totaled nearly $20,000,000. The project will provide essentially complete protection to the total overflow area of 33,000 acres on the Arkansas River from the dam site to the mouth of the Verdigris River. Also, the reservoir will contribute to the protection of 835,000 acres in the flood plain of the Arkansas River Valley below the Verdigris River. In addition to a highly developed agricultural area and a network of Federal and State highways to be protected, 8 railway companies have trackage and other facilities located in the flood plain. The power development of the project provides for an initial installation of three 20,000-kilowatt generating units which will produce 238 million kilowatt-hours of electrical energy annually that is vitally needed in the Southwest. Control of sedimentation and low-flow releases that will be made in operating the power phase of the project will aid materially in the development of navigation on the Arkansas River. The city of Tulsa has requested water supply storage in the reservoir to provide 100 million gallons per day for

											municipal and industrial purposes. Other towns within the area have also requested water supply storage in the reservoir.
OREGON											
Hills Creek Reservoir.	....do.....	23,721,000	32,065,000	100,000	1.86	Flood control Power Other	64 22 14	20,000	30	49,460	Hills Creek Reservoir will supplement the Lookout Point project, which now is nearing completion, and provide almost complete control of flood runoff from a combined drainage area of 991 square miles, or about three-fourths of the total Middle Fork-Willamette drainage basin area. Hills Creek and Lookout Point projects will be operated as an integrated unit of the plan for the Middle Fork to provide flood control, power, and other benefits. Early construction of the Hills Creek project is necessary in order to permit coordinated operation of Hills Creek and Lookout Point projects, for flood control, power generation, and other purposes. The power contribution will consist not only of at-site generation, but of increased output at Lookout Point project, because of increased flow. The net annual power benefit, including downstream power benefits creditable to the project, is computed at $615,800. Flood-control benefits are estimated at $1,756,200 annually.
TENNESSEE											
Carthage Dam.....	River and Harbor Act, July 24, 1946.	19,900,000	40,800,000	140,000	1.62	Power.....	100	92,000	24	129,988	The hydroelectric power at this project is critically needed in the rapidly expanding area, and will be fed into the TVA system. Due to the large impact of the defense industries in this area power requirements are continually increasing. The anticipated increase in power requirements will be at least 650,000 kilowatts in 1953 and 600,000 kilowatts in 1954.

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Data on planning projects in 1954 budget—Continued

MULTIPLE-PURPOSE INCLUDING POWER—Continued

State and project	Authorizing legislation	Estimated Federal cost at time of authorization	Present estimated Federal cost	Approved budget estimated, fiscal year 1954	Benefit to cost ratio	Breakdown of benefits: Type	Breakdown of benefits: Percent	Power installation contemplated (kilowatts)	Percentage of completion of plans[1]	Obligations in fiscal year 1952	Project justification
VIRGINIA											
Gathright and Falling Springs Reservoirs.	1946 Flood Control Act.	$11,000,000	$22,800,000	$50,000	1.40	Flood control Power Pollution abatement. Other	10 50 31 9	34,000	11	.....	No flood-protection works now exist along the Jackson and upper James Rivers. The project will afford a large measure of relief to agricultural areas; transportation and communication lines; and industries and community facilities in Covington, Clifton Forge, Iron Gate, Eagle Rock, Buchanan, Glasgow, Big Island, and Lynchburg. The power to be produced is needed to meet the rapidly growing power demand in the contiguous market area. The Southeastern Power Administration of the Department of the Interior endorses the construction of the Gathright and Falling Springs project from the standpoint of power. Gathright is situated near the western end of the Virginia Electric Power Co. system in an area to which the company must import power. Power from the project would be absorbed along the northwestern border of Virginia. In addition to flood-control and power benefits, heavily polluted waters of the Jackson and upper James Rivers will be diluted, and improved water supply for industrial expansion will be made available by augmented low river flows.
WASHINGTON											
Ice Harbor	River and Harbor Act, Mar. 2, 1945.	88,792,000	130,430,000	75,000	1.25	Power Navigation Recreation Irrigation	80.0 17.0 .4 2.6	195,000	23	.....	Present power demands in the Pacific Northwest are in excess of capabilities, and power shortages are retarding industrial and other development essential to regional economic growth and to prosecution of the national-defense effort. The major lock center for Ice

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PREVIOUS PLANNING FUNDS

Senator ELLENDER. Are there many of these projects on which planning has been done?

General CHORPENING. Yes, sir; most of them. As a matter of fact, all but three that we are including in this list for planning funds have previously had planning funds allotted.

Senator KNOWLAND. Now, do you have a number of projects where, say, you have completed your planning up to 80 percent of the planning and then stopped?

General CHORPENING. We have quite a number that are pretty well along on planning; as to that number that are as far along I would have to have some calculating done. There are some on which we have done considerable planning and quite a number of these included in the list would be what we would require to complete planning to the stage where we would be ready to go into construction when and if the administration and Congress direct.

Senator KNOWLAND. Any further questions, Senator?

Senator ELLENDER. Are there any of these projects for which you are going to obtain planning money that are sufficiently advanced so that you could proceed with the construction?

General CHORPENING. With construction at this time, and without more planning funds, is that the question?

Senator ELLENDER. That is the question.

General CHORPENING. I think there are some projects in this list that we could go ahead with, but we think we should do some additional planning before we go into construction.

Senator ELLENDER. The reason I ask you is that I notice here among the 35 you have the Plaquemine-Morgan City alternate route, which I am glad you have in here; it is very important. As I understood you the other day, you said you are sufficiently advanced in your planning so that you could probably expend a million dollars or a million and a half dollars on this project.

General CHORPENING. We could do so. But actually, if we did that we would not have carried our planning to the point where we could really proceed in the most expeditious manner.

Senator ELLENDER. You would not deem it advisable to ask for construction money?

General CHORPENING. We could do the dredging. We could do that part of it, but the planning in connection with the lock is not far enough advanced.

Senator ELLENDER. The dredging is really important?

General CHORPENING. That is a very essential part of the project. Of course, it is the lock that is going to take the longest amount of time to construct.

Senator ELLENDER. In other words, while you are building the lock, you could do the dredging?

General CHORPENING. That is correct.

Senator ELLENDER. That is your reason for saying you would rather go on a little further with your planning of the lock than to start dredging now, although you could dredge?

General CHORPENING. That is correct.

COLUMBIA RIVER PROTECTION WORK

Senator DWORSHAK. Can you give me the breakdown of the Columbia River item of $125,000?

Colonel HIATT. On the Columbia River local protection work on page 25 there would be proposed to allocate $20,000 for planning Portneuf and Marsh Creek areas near Pocatello and $80,000 for the Grande Ronde Valley in eastern Oregon and $25,000 for economic studies of the other tentatively authorized projects.

WEISER RIVER AND TRIBUTARIES

Senator DWORSHAK. Have you recommended any money for the study of the Weiser River and its tributaries? Isn't it as important or more so than many of the other projects?

Colonel HIATT. That is an important study and it is in the same category with the others.

That could be included in the funds we have for the economic studies in that basin.

GRANDE RONDE PROJECT

Senator DWORSHAK. You have $80,000 for the Grande Ronde and it would appear that this Weiser situation is as important, if not more so, than Grande Ronde. I am not speaking against that, of course, but I am trying to compare the relative importance.

General CHORPENING. The fieldwork on Grande Ronde, Portneuf River, and Marsh Creek projects has progressed further and economic justification of those two projects has been worked up.

Senator DWORSHAK. You have all this listed under Idaho and, of course, the Grande Ronde River and its tributaries are in Oregon.

General, do you know whether the Flood Control Division of the Department of Agriculture had done anything on that Weiser tributary basin?

General CHORPENING. I do not know.

Senator DWORSHAK. You have not done anything else or have you done some preliminary work?

General CHORPENING. We have done some very preliminary survey work and we have done some emergency work as the Senator knows.

FARRELL'S BRIDGE, TEX.

Senator ELLENDER. General, have you sufficient funds to complete planning on the second of the series of seven dams to be built in Texas?

General CHORPENING. Are you thinking of Farrell's Bridge?

Senator ELLENDER. Yes.

General CHORPENING. That is ready for construction.

FORT GAINES DAM

Senator KNOWLAND. Calling your attention to page 27 on Fort Gaines Dam, that apparently is the substitute for upper Columbia lock and dam proposed last year, at an estimated cost of $47 million,

and this Fort Gaines lock and dam is at a proposed estimated cost of $82,793,000. Since that is substantially double the estimated cost of the project you proposed last year, would you like to give the committee some further information as to this project?

CHANGE IN PLAN

General CHORPENING. Yes, sir. The authorized plan for the Apalachicola-Chattahoochee Rivers system, provides for four dams. Two of those are under construction. The Buford Dam at the headwaters and the Jim Woodruff Dam near the mouth of the river. Now, the authorized plan provided that a high dam be built at the upper Columbia site and that a low dam be built at the Fort Benning site. Those are the other two sites. We have found that the foundation conditions at upper Columbia were not satisfactory to build the structure that had originally been proposed there. We have found that, by placing the high dam originally scheduled for the upper Columbia site at Fort Gaines and by building a low dam at Columbia, we can build the project for less than it now would cost under the authorized plan.

Now, this question was raised in the House Committee on Appropriations. I pointed out that we were making this change in the interest of getting better engineering structures and at less cost. The chairman of the House committee asked me to go before the House Public Work Committee and present those changes and get the approval of the Public Works Committee on our proposals.

I did that. The House Committee on Public Works, the chairman of that committee, has sent to the chairman of the Appropriations Committee of the House a statement approving our change in planning, again in the interest of good engineering and economics.

So the Fort Gaines structure now shown at an estimated cost of $83 million is not the same structure that we were considering at upper Columbia. It is a different location of structure. I think we have a statement here which goes into some detail on that which will be supplied if you wish.

Senator KNOWLAND. That may be placed in the record at this point.

General CHORPENING. Yes, sir.

(The material referred to follows:)

MAY 19, 1953.

HON. JOHN TABER,
Chairman, Committee on Appropriations,
House of Representatives,
Washington 25, D. C.

DEAR MR. TABER: During recent hearings on fiscal year 1954 appropriations before your Subcommittee on Army Civil Functions, consideration was given to a request for $800,000 for continuation of construction on the project for flood protection and water control in central and southern Florida; and to a request for $140,000 for planning of the Fort Gaines lock and dam, which is a unit of the project for the Apalachicola, Chattahoochee and Flint Rivers of Georgia and Alabama.

Since the plans and estimates of cost for these projects as submitted by the Corps of Engineers included certain engineering modifications, the chairman of your subcommittee requested that these plans and estimates be presented to the Public Works Committee for review and clearance, prior to taking further action on the appropriations requested.

In response to this request representatives of the Chief of Engineers appeared before the Flood Control and Rivers and Harbors Subcommittees of this committee on May 6, 1953, and made a presentation of current plans for these authorized improvements; the engineering modifications that are involved; and of the present estimates of cost and the reasons for increases in these estimates.

On May 6, 1953, the subcommittees adopted the following resolutions:

That the proposed modification of the plan relating to the navigation and power project on the Apalachicola, Chattahoochee, and Flint Rivers, Georgia and Florida, authorized by the River and Harbor Act of July 24, 1946, as outlined by the Corps of Engineers in the hearing today, May 6, 1953 be approved and that the subcommittee report accordingly to the full committee.

That the proposed modification of the plan relating to the central and southern Florida flood control project, authorized by the Flood Control Act of 1948, as outlined by the Corps of Engineers in the hearing today, May 6, 1953 be approved and that the subcommittee report accordingly to the full committee.

On May 19, 1953, the subcommittees reported to the Committee on Public Works and the resolutions were concurred in.

Very sincerely yours,

GEORGE A. DONDERO,
Member of Congress, Chairman, Committee on Public Works.

OPERATION AND MAINTENANCE, GENERAL

CLASSIFICATION SCHEDULES

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate			$90,000,000
Balance transferred from "Flood control, general, emergencies"			7,000,000
Obligations incurred			97,000,000
Comparative transfer from—			
"Maintenance and improvement of existing river and harbor works"	$85,455,599	$77,316,594	
"Flood control, general"	5,168,627	6,870,334	
"Flood control, general, emergencies"	20,417,761	38,567,934	
Total obligations	111,041,817	122,754,862	97,000,000

Obligations by activities

	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Navigation:			
(a) Channels and harbors	$40,011,287	$45,335,033	$46,000,000
(b) Locks, dams, and canals	19,541,201	22,361,693	22,000,000
(c) Survey of northern and northwestern lakes	381,543	379,580	475,000
2. Flood control:			
(a) Reservoirs	2,482,087	2,962,692	3,300,000
(b) Other (including channel improvement projects, miscellaneous maintenance items and inspections)	615,074	923,120	700,000
3. Multiple-purpose projects including power	5,259,712	6,272,462	8,800,000
4. Lower Columbia River fish sanctuary program	137,668	710,981	870,000
5. Emergency operations:			
(a) Removing sunken vessels and other obstructions to navigation	920,155	815,504	740,000
(b) Protecting, clearing, straightening channels of navigable waters not specifically authorized by Congress (work under sec. 3, River and Harbor Act, Mar. 2, 1945)	66,250	179,869	190,000
(c) Flood control emergencies-repair and flood fighting and rescue work	20,436,619	38,630,804	13,925,000
6. Plant account	−2,544,176	4,183,124	
Total direct obligations	87,307,420	122,754,862	97,000,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Navigation:			
(a) Channels and harbors:			
(1) Corps of Engineers (military functions)	10,218,203		
(2) Other Department of the Army military functions	1,727,272		
(3) Department of the Air Force	5,958,350		
(4) Department of the Navy	315,772		
(5) Department of the Interior	56,672		
(6) Other Federal agencies	2,936,957		
(7) Non-Federal agencies	2,447,624		
(b) Locks, dams, and canals (non-Federal agencies)	63,213		
2. Flood control:			
(a) Reservoirs:			
(1) Other Department of the Army military functions	5,354		
(2) Non-Federal agencies	4,980		
Total obligations payable out of reimbursements from other accounts	23,734,397		
Total obligations	111,041,817	122,754,862	97,000,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
CORPS OF ENGINEERS			
Total number of permanent positions		$2,370	$2,325
Full-time equivalent of all other positions		204	152
Average number of all employees		2,421	2,347
Average salaries and grades:			
General schedule grades:			
Average salary		$4,526	$4,526
Average grade		GS–6.7	GS–6.7
Crafts, protective, and custodial grades:			
Average salary		$3,388	$3,388
Average grade		CPC–5.5	CPC–5.5
Ungraded positions: Average salary		$3,484	$3,484
Personal services:			
Permanent positions		$8,696,605	$8,670,206
Part-time and temporary positions		598,600	435,200
Regular pay in excess of 52-week base		33,395	33,294
Payment above basic rates		1,080,000	880,000
Total personal services		10,408,000	10,018,700
Travel		325,000	300,000
Transportation of things		450,000	440,000
Communication services		50,000	45,000
Rents and utility services		300,000	250,000
Other contractual services		30,000,000	21,000,000
Services performed by other agencies		3,500,000	3,000,000
Services performed by "Revolving fund, Corps of Engineers"		65,867,081	52,383,350
Supplies and materials		11,000,000	8,599,650
Equipment		250,000	200,000
Refunds, awards, and indemnities		2,800	2,900
Taxes and assessments		42,000	41,400
Subtotal		122,194,881	96,281,000
Deduct charges for quarters and subsistence		151,000	151,000
Total obligations		122,043,881	96,130,000
ALLOCATION TO DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE			
Total number of permanent positions		31	43
Full-time equivalent of all other positions		4	5
Average number of all employees		33	44
Average salaries and grades:			
General schedule grades:			
Average salary		$4,078	$4,037
Average grade		GS–6.4	GS–6.3
Personal services:			
Permanent positions		87,655	144,700
Part-time and temporary positions		13,630	14,000
Regular pay in excess of 52-week base		305	450
Total personal services		101,590	159,150
Travel		5,820	11,900
Transportation of things		820	1,000
Communication services		650	900
Rents and utility services		6,400	7,500
Printing and reproduction		80	445
Other contractual services		388,121	494,043
Supplies and materials		180,000	175,562
Equipment		27,500	19,500
Total obligations		710,981	870,000

Obligations by objects—Continued

Object classification	1952 actual	1953 estimate	1954 estimate
SUMMARY			
Total number of permanent positions		$2,401	$2,368
Full-time equivalent of all other positions		208	157
Average number of all employees		2,454	2,391
Average salaries and grades:			
General schedule grades:			
Average salary		$4,524	$4,524
Average grade		GS–6.7	GS–6.7
Crafts, protective, and custodial grades:			
Average salary		$3,388	$3,388
Average grade		CPC–5.5	CPC–5.5
Ungraded positions: Average salary		$3,484	$3,484
Personal services:			
Permanent positions		$8,784,260	$8,814,906
Part-time and temporary positions		611,630	449,200
Regular pay in excess of 52-week base		33,700	33,744
Payments above basic rates		1,080,000	880,000
Total personal services		10,509,590	10,177,850
Travel		330,820	311,900
Transportation of things		450,820	441,000
Communication services		50,650	45,900
Rents and utility services		306,400	257,500
Printing and reproduction		80	445
Other contractual services		30,388,121	21,494,043
Services performed by other agencies		3,500,000	3,000,000
Services performed by "Revolving fund, Corps of Engineers"		65,867,081	52,383,350
Supplies and materials		11,180,000	8,775,212
Equipment		277,500	219,500
Refunds, awards, and indemnities		2,800	2,900
Taxes and assessments		42,000	41,400
Subtotal		122,905,862	97,151,000
Deduct charges for quarters and subsistence		151,000	151,000
Total obligations		122,754,862	97,000,000

ACCEPTING CERTAIN RISKS

Senator KNOWLAND. When General Sturgis was before the Subcommittee on Operations and Maintenance Projects, Senator Case, who is not present at this time, noted that General Sturgis inserted the words "by accepting certain risks" and inquired as to what those specific risks were. That is on page 266 of our hearings. At that time the general said he would elaborate on just what risks he had in mind at the time that the Corps justified their request for operation and maintenance funds.

General CHORPENING. Colonel Milne will make a statement on that, Mr. Chairman.

Colonel MILNE. Mr. Chairman, I would like to take a minute of your time to develop a little background which can bring out more forcibly this calculated risk concept.

There is no question with regard to the importance of our waterways, both the inland waterways and the harbors. They are handling today about 20 percent of all the traffc that is moved in this country. But to be effective they must be maintained. Our maintenance problem is a twofold one. First of all, we must maintain the channel depths to that required for the bulk of the using transportation and secondly, we must maintain the structures that the Federal Government has spent money on to build in previous years.

To do both of those things requires a considerable amount of maintenance money. Since 1947, although the construction cost index has gone up 60 percent, the appropriations have remained at the same level. The obvious result is that in many cases we have simply had to defer both the dredging and the maintenance of many of these structures.

MAINTENANCE FUNDS

To give the committee an example of what that has meant in actual programing, in 1947 we maintained some 316 navigation projects. In 1953, this present fiscal year, we will maintain only 194.

Senator ELLENDER. How many of those 194 were in those you had before?

Colonel MILNE. I could not break that down now, sir, but a substantial number of that 194 were included in the previous 316. I would think about 90 percent.

Now, we have gotten to the point where practically all of our maintenance money, the bulk of it, has to go on our major harbors and major waterways, those carrying the bulk of our commerce.

With this general background, we come to the calculated risk concept that General Sturgis mentioned in his earlier discussions before this committee. He was thinking of two things:

CALCULATED RISK DUE TO DEFERMENT OF REPLACEMENTS

(1) The calculated risk due to the deferment of replacements. Particularly he mentioned the New Cumberland lock and dam on the Ohio River and the Warrier lock and dam on the Warrier River. Both of those new locks will replace from 2 to 4 existing old and outmoded locks. Because we know that their replacement is inevitable in the future, we have deferred major maintenance on those particular structures because we felt it would be false economy to spend a lot of money repairing them, realizing that in a few years they would have to be replaced in their entirety. They can fail. The only way to prevent their failure is to spend large sums of money literally rebuilding them to as-is dimensions, realizing that they are entirely inadequate for modern navigation. So we have deliberately limited spending our maintenance money. That is one element of the calculated risk concept.

LACK OF FULL MAINTENANCE

(2) The other element is the lack of full maintenance of other Federal river and harbor structures. The jetties and breakwaters that have been provided at Federal expense must be continually maintained if they are not going to deteriorate to the point where we will actually lose them. We have today, because of the lack of maintenance money, had to defer repairs to many of these structures, realizing full well that next year or the year after, because we did not maintain them this year, the money that the Federal Government will eventually have to spend will be greatly increased. You either have to face that prospect or you have to say we are going to walk off and leave this particular project.

SPECIFIC EXAMPLES

Now, to give you specific examples where our structures are not being maintained and where we have taken the calculated risk, there are such locations as Morro Bay in California where our breakwaters have deteriorated. We should spend money, but within the budget ceiling we could not do it.

The Port Aransas, Tex.——

Senator ELLENDER. Does that mean in a very few years this will cost us a great deal more to maintain them, to save them, to make them usable?

Colonel MILNE. There is that very distinct possibility.

Port Aransas, Tex., is an example.

Noyo Harbor, Calif., is another example.

But other areas within our budget were more important because they had deteriorated to a greater extent.

Caseys Pass, Fla., the jetties there have deteriorated badly and should be repaired.

Freeport Harbor, Tex., is another. Those are a few of the examples where we know we have taken a calculated risk in deferring the repairs.

TOTAL BUDGET FOR MAINTENANCE

Senator ELLENDER. What is the amount you are allowed for maintenance?

Colonel MILNE. The total budget for maintenance is in excess of $44 million, that is on channels and harbors.

Senator ELLENDER. How does that compare with the last fiscal year?

Mr. SMET. It is slightly more than the appropriation for last year, sir.

General CHORPENING. I think it may have amounted to $2 million more than we had this year.

Senator ELLENDER. With that $2 million more you figure you could do less work than you were able to do last year?

General CHORPENING. I would not say we would be able to do less work. I think we can do as much work. But it is bothering us, it is bothering the Chief of Engineers and all of us and as Colonel Milne is pointing out, we are continually deferring maintenance and when you ask the question will this particular structure fail or will this one fail, we cannot say that, but some of them are eventually going to do that and the repairs will cost considerably more.

AMOUNT REQUESTED FOR CHANNEL MAINTENANCE

Senator ELLENDER. How much did you ask for maintenance for the channels?

Colonel MILNE. About $53 million was our total request originally.

Senator ELLENDER. What did the Truman budget allow you?

Colonel MILNE. $46 million, sir.

Senator ELLENDER. And the revised?

Colonel MILNE. $44,630,000.

Senator ELLENDER. So you got cut back on the Truman budget and the Truman budget was cut back by the so-called Eisenhower budget?

Colonel MILNE. To give you some idea of what our field offices con-

sider their maintenance problems to be, they have estimated that to maintain the Federal projects that have been constructed with Federal funds, to maintain those projects to the minimum dimensions necessary to accomodate the commerce using the waterways, would require something in the neighborhood of $20 million more than is contained in the budget.

Senator KNOWLAND. No reductions were made by the House in the corps operations and maintenance items this year. They have indicated, however, the desire that the Corps of Engineers adhere more closely to the allocation submitted to the committee in the jusifications.

In this connection, the committee has received a number of requests concerning the need for additional maintenance funds, particularly from Senator Duff on the Delaware River as well as numerous requests for adquate maintenance on the Pacific coast in Oregon. I think we can have these made a part of the record at this point.

(The material referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
May 8, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Washington, D. C.

DEAR BILL: In connection with the hearings presently being conducted on the Army civil-functions appropriations covering the fiscal year commencing July 1, 1953, I should like to submit for your earnest consideration the urgent necessity and desirability of supporting, in the national interest, the project involving the improvement and development of the Philadelphia Port area.

There are, in my opinion, compelling reasons for the appropriation of sufficient funds for the restoration and maintenance of channels in the Delaware and Schuylkill Rivers. It is equally important that adequate funds be made available to carry out the Federal Government's obligation for the improvement of the Schuylkill River above Fairmount Dam upon which the Commonwealth of Pennsylvania has expended over $30 million to complete its part of the agreement.

The committee is no doubt aware of the fact that the Philadelphia Port area ranks first on the Atlantic coast in petroluem tonnage hauled and second in the Nation. This area is also destined to become one of the Nation's greatest steel-producing districts. The phenomental growth and development of the port area continues and its present and potential value cannot be estimated.

My interest in the problems of the Delaware watershed and in the improvement and development of the Philadelphia Port area stems from the time that I was privileged to serve as attorney general of the Commonwealth of Pennsylvania. Having dealt with the problems at first hand I had the opportunity of becoming quite familiar with the diverse details of the project. During the succeeding years when serving as governor, my interest in the progress of the projects in that area was sustained.

I am taking this opportunity to transmit for the committee's consideration a concise and carefully prepared report of the joint executive committee for the improvement and development of the Philadelphia Port area. It is respectfully requested that my views as well as this report be made a part of the record of your committee's hearings to the end that favorable consideration be given the appropriations requested.

Best regards,
Sincerely yours,

JAMES H. DUFF.

JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT
AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA,
Philadelphia, Pa., April 22, 1953.

Hon. JAMES H. DUFF,
United States Senate, Senate Office Building,
Washington, D. C.

DEAR SENATOR DUFF: We wish to thank you for your letter of April 8 wherein you advise that the Senate Appropriations Committee has scheduled hearings on the Army's civil-functions appropriations to begin on April 27 or April 29.

Your active interest in the problems of the great Delaware Valley by indicating your intention to follow the proceedings and give the Senate committee your views is gratifying and is deeply appreciated by those organizations represented by the joint executive committee.

We are desirous in accordance with the last paragraph of your communication to submit herewith data which we feel will be helpful to the Senate Appropriations Committee.

Prior to the start of the supercargo shipbuilding program the committee had consistently urged that the Delaware River channel from the sea to Philadelphia be restored to its authorized project depth of 40 feet mean low water at the earliest possible date. Authorization of such a channel in 1938 was based on a combination of Navy requirements and anticipated commercial traffic. Through the continued efforts of this committee and other interested parties, the 40-foot channel project was completed in 1942. In the years immediately following completion of the aforesaid project, commercial traffic did not require maintenance to the full authorized depth and the Navy requirements were the governing criteria. During that period the Navy agreed with the Army engineers that their requirements could be satisfied by maintenance of a 37-foot depth, and such lesser depth is apparently still adequate for Navy requirements.

As a result of conferences with the district engineer, Philadelphia and our delegates in Congress and subsequent briefs filed with the Department of the Army by this committee on behalf of its member organizations, the Chief of Engineers, United States Army acknowledged the fact that commercial requirements now justify additional maintenance effort and assured us that the fullest possible consideration was being given to increased maintenance of the Delaware River. The necessary funds to accomplish the work, however, were not allocated. Subsequently, numerous briefs were filed and further conferences were held with the proper Government officials and also Members of Congress from Pennsylvania, New Jersey, and Delaware. At these meetings, it was pointed out that an average of approximately $3,500,000 had been allotted annually by the Chief of Engineers for maintenance and restoration work over the last 4 years when in fact about $6 million yearly was needed. However, these conferences failed to produce the much-needed additional funds. Hence, the work on the restoration and maintenance of the 40-foot channel project below Philadelphia, beyond a depth of 37 feet, has and will remain practically at a standstill. Due to insufficient appropriations and/or allocations to prosecute this work to completion, conditions in the Delaware River have become a serious menace to safe navigation and to all major industries in this area that are dependent upon water transportation for their existence and prosperity.

When the 40-foot channel project was approved by Congress in 1938, the commerce of the Philadelphia port area amounted to only 34 million net cargo tons. In 1951 it totaled 74 million tons and, with the enormous strides being made industrially and otherwise throughout the entire area, it is reasonable to assume that before another decade has passed our waterborne commerce will have reached an annual total of 100 million net cargo tons.

While the past year has been a memorable one in the maritime and industrial development of this great port area, we are confident that its progress and prosperity in 1953 and in future years has been assured. With the area destined to become one of the Nation's greatest steel-producing districts, iron ore and its manufactured products will, within the next few years, contribute substantially to the total volume of commerce and further accentuate the importance of this area to the country's defense program. Recent and planned expansion of the steelmaking capacity in the Philadelphia port area has been termed the most significant single economic development of this decade. The $400 million Fairless works of the United States Steel Corp. at Morrisville, Pa., produced its first ingots in December 1952. This plant when completed will be one of the largest in the country, covering 3,800 acres and employing approximately 6,000 persons. It will have an annual capacity, initially, of 1.8 million tons of steel ingots, which will require about 6 million tons of iron ore, coal, and limestone. It is estimated that, in the near future, a total of 13 million gross tons of ore and coal will be transported annually by water to the Fairless plant when channel improvements will permit the use of large, deep-draft vessels. The steelmaking plant of the Colorado Fuel & Iron Co. located on the Delaware River at Claymont, Del., has increased its capacity and the projected plant of the National Steel Corp. will be situated at Thorofare, N. J. Other smaller plants have or will be located in this area, accompanied by the numerous industries allied to steel.

The Philadelphia port area is also one of the Nation's major oil-refining districts. Since World War II, the growth of the industry in this area has been phenomenal. It ranks first on the Atlantic coast in petroleum tonnage handled. The 6 major refineries in the area have expended in recent years over a quarter billion dollars to increase their refining capacity. Projects being currently installed or recently completed will give the area a refining capacity of about 725,000 barrels of crude oil per day.

In addition to this increased capacity, a new terminal is nearing completion at Billingsport, N. J., which will handle supertankers unloading petroleum products and another terminal is contemplated for location on the Schuylkill River. The numerous other terminals in the port area that specialize in the handling of petroleum products have been expanded to accommodate the modern supertanker. At present, approximately 75 percent of the port area's annual total of waterborne commerce is made up of crude oil and its products.

During the year, the Pennsylvania Railroad Co. continued construction on its new ore pier of the Delaware River at Greenwich Point, which will cost approximately $8 million and is expected to be completed in the near future. This pier with its appurtenances will be the largest tidewater ore-unloading facility in the country, with a rated capacity of 2,400 tons per hour.

The Reading Co. has expanded and modernized its terminal facilities and the city of Philadephia, realizing that the oil companies, steel companies, railroads, and others with waterfront holdings could, in general, be depended upon when the necessity arose to improve and enlarge their especially equipped terminals for the transshipment of bulk commodities such as grain, ores, coal, oil, sugar, etc., continued during the year to concentrate its efforts upon the development of an improved type of general-cargo terminal that would, by its efficiency, attract commerce to the port.

The super-bulk-cargo carriers utilizing the Delaware River ports require the full project depth and width for safe navigational purposes. With a 37-foot channel, a vessel of the 30,000-ton type would not only of necessity have to wait for the coming tide but would have to confine her navigation to more than half floodtide, which in turn would limit her movements to the last few hours of the coming tide. You will note from the attached illustrations that should one of these super-vessels, which have a loaded draft in excess of 37 feet under way and are 660 feet in length, go aground on a shoal spot in the channel and happen to be slewed across the channel by the tide, the Delaware River would be blocked to oceangoing vessels. The channel width in the straight reaches is only 800 feet.

You will further note from the attached sketches the dangerously small clearance between the bottom of a ship and the bed of the river while the vessel is under way with a draft of 37 feet 3 inches.

There is also now in service between Philadelphia and foreign ports supertankers of 38,000 dead-weight tons which are 707 feet in length, 93 feet in breadth, and under way will have a draft in excess of 37 feet. These vessels have an oil-carrying capacity of 336,000 barrels, as compared with 129,000-barrel capacity of the World War II vessels of the T–2 type.

Recently the keel for a new 45,000-ton bulk-cargo vessel was laid and others are also expected to be under construction in the near future. These big vessels will have an overall length of 736½ feet, breadth of 102 feet, and an underway draft in fresh water of 40 feet 4½ inches. Hence, due to insufficient depths, vessels of this size could not navigate the Delaware River channel at its designed draft.

The report of the district engineer, Philadelphia (E. D. Form 443) dated April 7, 1953, a copy of which is enclosed herewith, showing the condition of the main ship channel in the Delaware River from the sea to Allegheny Avenue, upper Philadelphia Harbor, indicates that on a number of the ranges the minimum depth is still substantially short of the 40-foot authorized depth and in many instances under the 37-foot depth. For your convenience, we have shown the variations in depths in red on the attached drawing of the Delaware River.

In face of this unfavorable situation, we find that the report of the district engineer dated April 17, 1953, relative to the location of the dredging plant in the Philadelphia district during the week commencing April 20, 1953, shows only one seagoing hopper dredge working in the Delaware River channel project. This, of course, is due to lack of funds for restoration and maintenance purposes.

Another problem is the inadequate dimensions of our existing anchorage areas, which are causing much concern and anxiety among those responsible for the

safe and expeditious movement of our waterborne commerce. This committee was instrumental in having a resolution passed by Congress last year which authorized a review of reports in the Delaware River, etc., with the view of determining whether any modification of our anchorage facilities were advisable. Subsequently, the district engineer, consistent with the resolution, held a public hearing on January 15, 1953, and a copy of this committee's brief filed at that time is attached for your information. Authorized Federal projects in connection with the improvement of the Schuylkill River above and below Fairmount Dam will require adequate funds for maintenance if the needs of navigation and commerce are to be met. The same applies to the 25-foot authorized project in the Delaware River between Philadelphia and Morrisville Pa., and the maintenance of Wilmington Harbor, Del., to its project depth of 30 feet.

The Board of Engineers for Rivers and Harbors, as you know, recently recommended the extension of the 40-foot channel in the Delaware upstream from the Philadelphia Naval Base to the Fairless Works of the United States Steel Corp. at Morrisville, Pa., thence a 35-foot channel to Trenton, N. J. These improvements, however, must have the approval of Congress, in view of which nothing can be done thereon at the moment.

We know that you are cognizant of the fact that through the years no other single factor has contributed as much to the growth and prosperity of Philadelphia and its surrounding areas as the Delaware River. It provides an outlet to the sea over which the commerce of the world flows freely to rank Pennsylvania's only seaport with the major world ports. Philadelphia, located in the center of an area in which the industrial growth has not been excelled elsewhere during the past year, is truly a great port. The volume and importance of its commerce to the Nation and the world at large are sufficient justification for the continued expenditure of funds by the Federal Government to provide the necessary channel, anchorage, and other facilities to accommodate increased commerce.

We are grateful to you for your cooperation and, should you desire additional information as to any matters relating to Philadelphia port area, please feel at liberty to communicate with us.

Sincerely yours,

H. G. SCHAD, *Chairman.*

JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA,
Philadelphia, Pa., January 9, 1953.

Col. WALTER KRUGER, Jr.,
District Engineer,
United States Engineer Office,
Philadelphia, Pa.

ANCHORAGES, DELAWARE RIVER—PHILADELPHIA TO THE SEA

DEAR SIR: In response to your notice of public hearing to be held on December 10, 1952, and changed to January 15, 1953, the Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area submits the following in support and in favor of the improvement of the existing anchorages and the establishment of additional areas in the Delaware River between Philadelphia and the sea.

The joint executive committee, which was organized in 1888, is composed of the maritime and commercial bodies indicated below, namely:

Board of Harbor Commissioners, city of Wilmington
Bureau of Port Operations, city of Philadelphia
Chamber of Commerce of Greater Philadelphia
Commercial Exchange of Philadelphia
Commercial Museum of Philadelphia
Foreign Traders Association of Philadelphia
Lumbermen's Exchange of Philadelphia
Philadelphia Bourse
Philadelphia Marine Trade Association
Philadelphia Maritime Exchange
Philadelphia Port Bureau
Pilots Association for the Bay and River Delaware
Port of Philadelphia Maritime Society

South Jersey Port Commission
Vessel Owners and Captains Association

Its purposes and objectives are to promote concerted action in matters concerning (1) the improvement of the channel and anchorages in the Delaware River and its tributaries, (2) terminal facilities requisite for the proper handling of waterborne commerce, and (3) improvement and development of waterborne commerce through the ports located in the Philadelphia port area.

Since its inception this committee has taken the initiative and carried through to successful conclusion most of the major channel projects in the Delaware and Schuylkill Rivers, including anchorages. The committee sponsored the resolution which authorized this review of reports in the Delaware River, etc., "with a view to determining whether any modification of the anchorage facilities is advisable at this time."

GROWTH OF THE PHILADELPHIA PORT AREA

Through the years, from early Colonial times, no other single factors has contributed as much to the growth and prosperity of Philadelphia and its surrounding areas than has the Delaware River. Emptying into the Atlantic Ocean, some 90 miles from Philadelphia, it provides an outlet to the sea over which the commerce of the world freely flows to rank the port of Philadelphia with the major seaports of the world. Philadelphia is truly a great port and the volume and importance of its commerce to the Nation are sufficient to warrant large expenditures to provide adequate approach channels and anchorages.

The port of Philadelphia ranks second in the United States in the handling of waterborne commerce. Since 1938, when the 40-foot channel project with its appurtenances was approved, Delaware River commerce increased from 34 million to 74 million net cargo tons in 1951. With the great industrial growth taking place throughout the entire Delaware River Valley, it is reasonable to assume that before another decade has passed our waterborne commerce will have exceeded the annual total of 100 million net cargo tons.

The Philadelphia port area is one of the country's major oil-refining areas. Since 1945 the growth in the oil industry in this area has been phenomenal. The area ranks first on the Atlantic coast in petroleum tonnage handled and second in the Nation. The 6 major oil companies in the Philadelphia port area have expended almost a quarter billion dollars increasing their refining capacity and projects being currently installed or recently completed will give this area a capacity of about 725,000 barrels of crude oil per day. The present capacity at New York is 369,000 barrels which will give Philadelphia a 92-percent greater capacity than New York.

In addition to this increased refining capacity, a new oil terminal is being established at Billingsport, N. J., which will handle supertankers unloading petroleum products, and another large terminal is contemplated for location on the Schuylkill River. To handle this volume of petroleum, 2,260 T–2 tanker equivalents will be required annually. At present, more than 75 percent of the port area's annual total of waterborne commerce is made up of crude oil and its products. Over 17 million net tons of crude petroleum, valued at approximately $240 million, were received from foreign ports during the calendar year 1951, upon which a duty of nearly $11 million was paid.

With the area destined to become one of the Nation's greatest steel-producing districts, iron ore and its manufactured products will within the next few years contribute substantially to the total volume of commerce and further accentuate the importance of the area to the country's defense program. Recent and planned expansion of the steelmaking capacity in the Philadelphia port area has been termed the most significant single economic development in the past half century. When the $400 million Fairless works of the United States Steel Co. near Morrisvile, Pa., is completed and in operation, it will have an annual capacity of 1.8 million tons of steel ingots. This will require about 6 million tons of iron ore, coal, and limestone. The latest figures available indicate that the initial operation of the Fairless works, starting early in 1953, will require delivery of 3.3 million gross tons of coal and foreign ore annually by water. In addition, when there is a deeper channel, there will be shipped to this plant between 3.5 million and 6 million gross tons of foreign ore annually for stockpiling and blending; such ore to be used at other steel plants in the winter months when ore transportation in the Great Lakes is not available. It is estimated that

a total of 7 to 13 million gross tons of ore and coal will be transported annually by water to the Fairless works if large ore vessels can be utilized. Other uses of river transportation to and from this plant would be fuel oil, machinery, equipment, and finished products, such being in addition to the above tonnages of raw materials. The large steelmaking plant of the Colorado Fuel & Iron Co. is located on the Delaware River at Claymont, Del., and the projected National Steel Corp. plant will be situated at Thorofare, N. J. Numerous steel-fabricating plants are also expected to locate within the area.

The Pennsylvania Railroad is building a new ore pier in the Delaware River at Greenwich Point at a cost of $8 million. This pier with its appurtenances will be one of the largest tidewater ore-unloading facilities in the country, with a rated capacity of 2,400 tons per hour. This company recently petitioned the Interstate Commerce Commission to equalize the rates on the movement of import iron ore from Philadelphia to points west of Pittsburgh to the Baltimore level. These are a few of the many industrial changes that will contribute to increased traffic on the Delaware River.

The Reading Co. has expanded and modernized its Port Richmond terminal and the city of Philadelphia, realizing that the railroads, oil companies and others with waterfront houdings could, in general, be depended upon when the necessity arose to improve and enlarge their specially equipped terminals for the transshipment of bulk commodities such as grain, ores, coal, oil, sugar, etc., concentrated its construction efforts upon the development of an improved type of general-cargo terminal that would by its efficiency attract commerce to the port. Over the years, the city has built 12 modern piers of concrete-and-steel construction, with railroad and storage facilities.

Added to the bulk-cargo carriers are over 200 regular scheduled sailings of line vessels monthly to the various ports of the world. With this unprecedented industrial expansion in this area, it is not difficult to visualize the density of traffic on the Delaware River within the next few years. With our shipbuilding facilities and repair yards, together with increased activities at the Philadelphia Naval Base, it is evident that this port area is vital to our national security and its approach channels and anchorages should be adequate for safe navigation.

TREND TOWARD LARGER VESSELS

As the worldwide demand for petroleum and its products increases each year, a corresponding change is noted in the demand for tanker tonnage. During World War I, in the period from 1914 to 1921 there were built in United States shipyards 328 tankers, the average dead-weight capacity of each amounted to 10,147 tons. In the intervening years before World War II, numerous tankers were built of varying dead weights but with a general trend toward increased size. World War II and its huge demand for petroleum resulted in the building, in the United States, of some 661 tankers with an average dead-weight of 16,080 tons during the period from 1939 to 1946 inclusive. Thus in the 25-year period from 1921 to 1946, the need for tankers doubled the number required and increased their average dead-weight capacity by almost 60 percent.

Since World War II, rapidly increasing operating costs, increased demand for petroleum, and the replacement of war damaged or obsolescent tonnage has brought about the construction of the present supertanker. Starting in 1947, the first of these vessels, of 27,900 tons dead weight, entered service. By August of 1952 there were 99 vessels in worldwide service with dead weights of 24,000 to 33,000 tons. On the books are orders for 185 additional vessels in this class scheduled for delivery within the next 3 years. In addition, contracts have been placed for vessels that will dwarf the present supertanker, which include 5 tankers of 45,000 dead-weight tons each, 2 of 44,000 tons, 2 of 40,000 tons, and 4 of 38,000 tons. The total number of tanker buildings on order as of August 1952 amounted to 691 vessels, totalling 14,300,000 tons dead weight, which represents 46 percent of the existing world tanker fleet. With allowance for the number of supertanker new buildings in this group, the majority of the remaining vessels are of 16,000 to 20,000 tons dead weight with a few 12,000 to 14,000 tonners included and less than 10 small ships of 7,000 to 8,500 tons.

In November 1951 when the *Atlantic Seaman* went into service in the Delaware River, her dead weight of 30,155 tons, with overall length of 660 feet, beam of 85 feet, and draft of 34 feet 3 inches placed her at the top of the list as the world's largest tanker. The month of January 1953 will record the keel laying in the United States of a tanker whose dead weight tonnage will exceed this one time Goliath by 50 percent. This new supervessel of 45,400 tons dead weight will have a length of 735 feet, beam of 102 feet and draft of 37 feet 6 inches. Her

delivery is contemplated for December 1954. Other tankers of this super giant class have similar dimensions. By comparison, the former queen of American passenger ships, the steamship *America*, has a length of 723 feet, breadth of 93 feet 3 inches, and draft of 32 feet 6 inches. In a matter of a few years we will have at least 8 or 10 tankers afloat whose dimensions, particularly draft and displacement will exceed those of the second largest American passenger ship afloat.

Similarly, with respect to steel, superore carriers are already on the building ways. The dwindling supply of domestic ore has caused the steel industry to supplement its needs by importing ore from Liberia, Labrador, Venezuela, and other foreign countries. During the first year of operation, we understand it is the intention of the United States Steel Co., due to the limited channel dimensions in the Delaware River to Morrisville, to transport iron ore from foreign countries to their Fairless works in Victory, Liberty, C–2, and C–3 vessels. The United States Steel Co. estimate that their imports of foreign ore will be 3 million tons the first year beginning early in 1953 and increasing annually to at least 7 million tons in a 5-year period. As the ships now intended for this service are of about 10,000 tons dead weight, this would indicate an increase of 300 loaded ships for the year 1953 over and above the present traffic. This would be increased to 700 additional ships by 1958 unless the 40-foot channel from Philadelphia to Newbold Island is completed at an earlier date to allow the use of superore carriers in this trade. When the 40-foot channel is completed to the Fairless works, it is contemplated that superore carriers of about 40,000 tons dead-weight capacity will supplant the *Victory*, *Liberty*, C–2, and C–3 vessels. The dimensions of the large ore carriers will be approximately 700 feet in length, 100-foot beam, a still draft of 35 feet, and a speed of 14 knots.

The following table shows that there has been a definite trend to deeper draft and larger vessels utilizing the Delaware River over the last few years.

Trips and drafts of vessels [1] arriving and clearing Philadelphia port area

Draft	1946	1947	1948	1949	1950	Total
41				1		1
40					2	2
39						
38			1		1	2
37			1		1	2
36					2	2
35			2	1	39	42
34	29		4	5	88	126
33	58	6	20	26	115	225
32	132	74	74	73	379	732
31	634	388	307	356	720	2, 405
30	507	613	776	562	333	2, 791
28 to 30	821	540	738	658	509	3, 266
Total	2, 181	1, 621	1, 923	1, 682	2, 189	9, 596

[1] Steam and motor vessels only.

Source: United States Army engineers.

The foregoing table is indicative of the influence of deep-draft vessels as represented by the advent of the supercargo vessels. In 1950, a total of 242 vessels arrived with drafts between 33 and 35 feet. It is, therefore, assumed this figure will be further increased as the supervessel building program is completed, along with the projected expansion of industry in the Philadelphia area.

DISCUSSION OF ANCHORAGES AND RECOMMENDATIONS

The existing anchorage areas in the Deleware River are inadequate and present a serious menace to life, property, and the expeditious movement of our waterborne commerce. The constant growth of the Philadelphia port area's commerce and the trend toward larger and more economical vessels, as explained in the preceeding paragraphs warrant the improvement of our present anchorages and the establishment of additional areas of sufficient dimensions to meet the needs of modern water transportation and safe navigation.

To discuss our anchorage problems, we must also briefly review the difficulties experienced by masters navigating the main ship channel under existing condi-

tions, for the channel and anchorages are integral insofar as the handling of large modern ships is concerned.

Masters of these supercargo vessels have, on various occasions, expressed concern over the handling of these vessels on low tide stages. It is their opinion the navigation of such vessels in the Delaware River during low water periods is a hazard due to the fact that under present conditions it is necessary to limit them to a small percentage of their maneuverability by reducing speed to prevent doing serious damage to shore installations and vessels moored to docks along the waterway. They are also fearful that when speed is reduced, these vessels are liable to sheer and ground if they "smell" bottom. For instance, while one of these supercargo carriers was proceeding along the upper reaches of Liston range on the low stages of the tide, having a draft of approximately 35 feet fresh water and a possible squat of 2 feet, it was necessary to slow down to less than half speed due to the fact that considerable disturbance was created by the vessel being close enough to the bottom to cause heavy rolling seas to board her from both sides.

On another occasion, 1 of these supercarriers was proceeding at slow speed in the Chester range under approximately the same conditions as outlined above and caused such disturbance to vessels moored at various docks along the route, and particularly to those vessels inside the projecting piers, that 1 vessel was torn loose from her moorings and grounded. It would appear from all indications this accident was due to insufficient water displacement and not excessive speed as the vessel had been proceeding for a considerable distance at half and slow speed against an ebb tide with an average speed of 6 knots at the time of the incident.

While the masters of supertankers and of other large ships entering this port are gravely concerned with the present channel conditions, they are equally alarmed over the lack of adequate anchorage areas between the Delawar Capes and Philadelphia. A study of existing conditions reveals that after passing anchorage No. 1, located off Bombay Hook in the upper Delaware Bay, there is no safe anchorage entirely outside the channel limits for ships the dimensions and draft of the supertankers now using this waterway. It is the opinion of this committee that any anchorage less than 2,000 feet in width will not allow sufficient swinging room to prevent these large vessels becoming a menace to navigation. In both Marcus Hook and Mantua Creek anchorages when vessels swing with the tide, they extend across the channel as the anchorages are not of sufficient width to allow ships to be anchored far enough to the eastward to be clear of the channel. When these large vessels swing into the channel while anchored, they present an obstruction to vessels under way proceeding up or down the river. In addition to the inadequate size of the anchorage at Marcus Hook, it also presents a problem due to congestion. This anchorage is a general anchorage with one portion of it set aside for quarantine purposes. With the increasing number of supertankers entering the Delaware River and the fact that most of them arrive from foreign ports requiring them to pass quarantine, it can readily be seen that the dimensions of the present Marcus Hook anchorage is totally inadequate for the tonnage now attempting to use it. When movements of foreign ore to this port are begun in March 1953, the present congestion, together with increased accident risk, will most certainly be increased.

With the present draft limitations imposed by the controlling depth of 25 feet from Port Richmond to Newbold Island further congestion of Mantua Creek and Philadelphia port anchorages is also expected when ore movements by water are begun in early 1953.

It is inevitable that ships will have to anchor to await tides and favorable weather conditions.

To illustrate the precautions taken by the operators to avoid anchoring their large ships in the Marcus Hook anchorage congested area, they usually either request quarantine officials to pass their vessels arriving from foreign ports after hours, slow the ships down, or anchor them in the lower Delaware Bay so as to arrange their arrival at quarantine during regular hours. On numerous occasions the United States Public Health authorities have been requested to hold their inspection station open after their regular hours of 6 a. m. to 6 p. m. in order that these supertankers would not be required to anchor in this congested area.

To further illustrate the present congestion at Marcus Hook anchorage during the period from July 1, 1951, to June 30, 1952, United States Public Health officials at Marcus Hook quarantine station boarded a total of 1,697 inbound vessels. Of this total, 585 were inspected under way and 1,112 were inspected

at anchor. This figure does not include the many ships under enrollment bound to the docks in the Chester-Marcus Hook area nor to the Sun Shipyard that also use this anchorage. If the United States Public Health Service had not been able to inspect 585 of the inbound vessels under way, undoubtedly some of these vessels would have arrived at quarantine and found themselves in the unenviable position of not being able to anchor due to congestion and would have had to maneuver to turn in this congested area with the risk of accident ever present and proceed back down river until an anchorage could be found.

In addition to these delays there of, of course, the chance of further delays in the event fog sets in during this waiting period in the lower bay while the rest of the river might be clear.

The committee would like to bring out the hazard of navigating the lower Delaware River without adequate emergency anchorages being available. (The trend in recent years, as stated previously, has been toward larger and more economical ships.) Most of these large ships are oil tankers that will undoubtedly trade to Delaware River ports, but in the near future, this port area will also be called upon to accommodate ore carriers up to 700 feet in length. It is impractical, except in the direst emergency, to attempt to anchor ships of the size we are discussing in the present 800-foot channel. Should one be anchored in the channel due to fog or to mechanical failure and swing with the change of the tide, she would be almost certain to hang up her bow or stern on the edge of the channel. Such action would not only cause considerable damage to the ship but would cause partial blocking of the channel until the ship was refloated and moved. We do not like to contemplate the results of one of these ships blocking the main ship channel in periods of low visibility and have another ship proceeding either up or down the channel looking for a place to anchor. In connection with anchoring these large vessels in the channel due to an emergency, it has been necessary to dispatch tugs to assist them in order to prevent their going aground when swinging with the tide.

To alleviate the conditions outlined above, this committee recommends that certain emergency anchorages be provided between anchorage No. 1 off Bombay Hook and the present Marcus Hook and Mantua Creek anchorages, that one new anchorage be established above Mantua Creek anchorage, and Kaighn Point anchorage and anchorage No. 14 be improved. These anchorages with exception of Horseshoe, are located on the right ascending side of the channel for easy access of deep loaded inbound vessels. They have been positioned where they can be reached in periods of low visibility with a minimum number of turns at range intersections.

In order to provide adequate anchorage facilities for these super cargo carriers and other large vessels, including ships of the United States Navy and other departments of the Federal Government and reduce the present hazards of navigation to a minimum, the Joint Executive Committee recommends the following modifications of the anchorage facilities in the Delaware River between Allegheny Avenue, Philadelphia, and the sea.

1. Provide an anchorage 3,600 by 2,000 feet dredged to a depth of 37 feet on the easterly side of Liston Range between bell buoy No. 6L and buoy No. 8L.

2. Improve anchorage No. 2 (explosives anchorage) by dredging to a depth of 37 feet.

3. Extend the present anchorage on the east side of New Castle Range opposite Pea Patch Island to 3,200 feet in length, 2,000 feet in breadth and a depth of 37 feet.

4. On the east side of Cherry Island Range opposite the entrance of Christiana River extend the present anchorage No. 6 to 3,250 feet in length, 2,000 feet in breadth, and a depth of 37 feet.

5. Marcus Hook anchorage: Extend the length of the present Marcus Hook anchorage to 15,600 feet from buoy 6M to buoy 2C, widen to 2,000 feet and deepen to 37 feet over the entire area.

6. Mantua Creek anchorage: Extend in northeast direction to a total length of 15,200 feet to gas buoy No. 44, widen to 2,000 feet, and deepen to 37 feet over entire area.

7. Establish a new anchorage at Horseshoe Shoal to extend from the eastern end of the existing naval anchorage 7,500 feet eastward to the western edge of east Horseshoe Range, 1,800 feet wide from present buoys No. 35 and No. 37 and dredge to a depth of 35 feet.

8. Improve the existing Kaighn Point anchorage by dredging to 35 feet throughout.

9. Extend present anchorage No. 14 off Petty Island from the restricted anchorage 7,050 feet in a westerly direction, 750 feet wide, and dredge to a depth of 35 feet.

BENEFITS

The Joint Executive Committee is not in possession of complete information as would indicate specifically the entire monetary benefits that would accrue should the foregoing improvements in our anchorage facilities become an accomplished fact. However, the submission of such data will, we understand, be contained, in a brief filed on behalf of the American Merchant Marine Institute, Inc. The institute is a trade association composed of 72 United States steamship companies operating 8 million gross tons of American-flag tank, dry cargo and collier vessels in the domestic and foreign trades of the United States. It is well qualified and equipped to develop from its members and others the tangible benefits that would be derived from the requested improvement of the Delaware River anchorage facilities. Generally speaking, such improvements are not only of immense value to the economy of the great States that border on the Delaware River, but also to the Nation at large. It is apparent that the T–2 wartime standard tanker of about 17,000 deadweight tons has been replaced by the more economical supertanker, varying in size from 24,000 to 33,000 deadweight tons. It has been estimated that the saving in using a 30,000 ton supertanker is $0.69 per ton as compared with a T–2 vessel and the use of these super cargo vessels exclusively would provide a transportation saving of about 5 million dollars annually. Also the delivery of iron ore direct from foreign ports to the Fairless Works at Morrisville, Pa., (when the 40-foot channel project has been extended upstream) by super ore carriers, rather than by smaller type vessels or by transshipment at Philadelphia will, no doubt, represent another annual saving of 5 million dollars.

We understand, while we have no documentary evidence, that on various occasions supertankers have experienced delays up to 6 hours a trip due to the lack of adequate anchorages in the Delaware River. Hence, it would appear, with the daily worth of a supertanker averaged over the past year being approximately $13,200 or about $550 per hour, these delays could be eliminated and this substantial outlay of funds saved, provided the requested facilities were provided. Also the continued threat to life and property and the closing of the port due to a possible collision beween these super cargo carriers and other vessels would be reduced to a minimum.

The Delaware River, which is destined to become the Nation's greatest and most important highway of commerce, both from a national defense and commercial standpoint, should have the necessary facilities for its safe and economic use by these supercargo vessels, present and future. Favorable recommendations by the proper authorities to Congress should no longer be postponed.

SUMMARY AND CONCLUSIONS

Since the adoption of the first comprehensive project for the improvement of the Delaware River in 1885,, there has been complete coordination of the facilities which comprise the Philadelphia Port area. In consequence of the healthy competition that ensued and as the result of carefully planned supervision, there has been developed the Nation's second greatest seaport with facilities for the handling of all kinds of waterborne commerce that are unsurpassed and seldom equalled throughout the world. The enormous capital expenditures and resources which have made this development possible are not unknown to the district and division engineers, nor to the Board of Engineers of Rivers and Harbors. In the numerous briefs filed by this committee in connection with the deepening of the ship channel, requests were always included for adequate anchorage areas to meet the needs of commerce. Prior to the start of the supertanker building program, this committee had consistently urged that the Delaware River channel from the sea to Philadelphia be restored to its authorized project depth of 40 feet mean low water and adequate anchorage facilities be provided. In January 1951 and on several occasions since, the committee directed the attention of the Chief of Engineers, Department of the Army, to the fact that the inadequate dimensions of our anchorage areas were causing much concern and anxiety among those responsible for the safe and expeditious movement of our waterborne commerce and asked that certain areas be enlarged immediately. We were informed that the widening of the anchorages from their presently authorized width, depth, and length to increased dimensions would require authorization by Congress.

We conclude that sufficient justification for the further improvement of our

anchorage facilities has been shown and the requirements of commerce an navigation are so vital as to warrant approval at this time. This dangerous and restrictive situation, due to the lack of proper anchorages, is certain to become more acute with the anticipated increased traffic on the Delaware River unless there is immediate recognition of our needs.

The committee urgently requests a favorable recommendation, with the suggestion that suitable safeguards to our national defense and economy fully warrant a preferred status for the modified project to assure completion within the least possible time.

Aside from the question of anchorages, this committee would also like to suggest the following:

That the 31-foot spot just south of the buoy No. 10 at the beginning of Brandywine Range be removed to provide more deep water at the beginning of this range.

That buoy No. 46 be moved and reestablished approximately 620 yards to the westward of its present position where West Horseshoe Range narrows to 800 feet.

Respectfully submitted for and on behalf of the Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area.

GEORGE E. BARTOL, JR., *Chairman.*

PROTECTING, CLEARING, AND STRAIGHTENING CHANNELS

Senator KNOWLAND. With particular reference to item 5 (b), "Protecting, clearing and straightening channels of navigable waters." without specific authorization from Congress the sum of $190,000 is requested. I have a letter from the Corps of Engineers addressed to me stating the present policy with respect to the use of these funds. I think it would be desirable to place this letter in the record. I wonder if you can give us some indication of the use of the funds appropriated last year for this purpose.

(The material referred to follows:)

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, March 3, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Senate Appropriations Committee,
United States Senate, Washington, D. C.

DEAR SENATOR KNOWLAND: Reference is made to a recent telephonic inquiry of a member of your staff requesting that your committee be furnished a statement of the policy of the Corps of Engineers with regard to the accomplishment of work under the provisions of section 3 of the River and Harbor Act, approved March 2, 1945.

Section 3 of the River and Harbor Act approved March 2, 1945 authorizes the Secretary of the Army to allot not to exceed $300,000 from any appropriations heretofore or hereafter made for any one fiscal year for improvement of rivers and harbors, for removing accumulated snags and other debris, and for protecting, clearing, and straightening channels in navigable harbors and navigable streams and tributaries thereof, when in the opinion of the Chief of Engineers such work is advisable in the interest of navigation or flood control. The abovementioned act repealed the paragraph in section 1 of the River and Harbor Act approved July 25, 1912, relating to removal of temporary obstructions, as amended by section 3 of the River and Harbor Act approved July 3, 1930 and section 3 of the River and Harbor Act approved October 17, 1940.

The policy of the Chief of Engineers in the application of above stated authorization for emergency channel work is as follows:

(*a*) This authority is applied in emergencies to provide a means whereby unreasonable obstructions in the portions of navigable harbors, streams, and their tributaries may be cleared or removed so that existing traffic may be immediately benefited.

(*b*) Favorable consideration is not given to work under this authority.

(1) Within the limits of any authorized project where new work remains to be accomplished unless an emergency results from aggravated conditions arising subsequent to the authorization of the project.

(2) For repeated operations in the same location. Accordingly, when recurring maintenance work is required to secure enduring benefits from the initial work, local interests are informed of the necessity for a specific authorized project or of accomplishing such maintenance at their own expense.

(3) For general widening and deepening other than for emergency need of channels to meet the desires of navigation interests to use larger vessels.

In addition to the above general policy, determinations made for utilizing funds for accomplishment of work under this act must be based on current criteria established for maintenance activities under our civil works program, i. e., having value in serving the movement of major commerce of importance to defense or essential civilian requirements.

Sincerely yours,

WM. WHIPPLE,
For C. H. CHORPENING,
Brigadier General, USA,
Assistant Chief of Engineers for Civil Works.

REMOVAL OF NAVIGATION HAZARD

Colonel MILNE. There were three locations that this money was applied to in this fiscal year. In the Great Lakes area, a large reef was a serious hazard to navigation. Under our emergency authority we authorized the division engineer to spend money to remove a portion of that reef, so that it would no longer be a serious hazard. That was the principal use of that money.

There were two other smaller jobs on which I can furnish information for the record.

(The material referred to follows:)

Allotments in fiscal year 1953 under section 3 of 1945 River and Harbor Act

Location:	*Amount*
Rice Creek, Fla	$3,500
Columbia Slough, Oreg	8,400
St. Marys River at Gros Cap Reef, Mich	150,000
Total	161,900

GENERAL EXPENSES

Classification schedules

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate			$11,000,000
Reimbursements from non-Federal sources			2,000
Reimbursements from other accounts			20,000
Obligations incurred			11,022,000
Comparative transfer from—			
"Maintenance and improvement of existing river and harbor works"	$3,767,357	$6,264,237	
"Flood control, general"	991,324	4,298,313	
"Flood control, Mississippi River and tributaries"	166,215	884,646	
"Flood control, general, emergencies"		449,766	
"Flood control on tributaries of Mississippi River, emergencies"		12,081	
"Flood control, Sacramento River, California"		11,609	
"Niagara power development, Corps of Engineers"		1,565	
Total obligations	4,924,896	11,922,217	11,022,000

NOTE.—Reimbursements from non-Federal sources are received from private individuals, commercial concerns, nonappropriated funds, and States and municipalities (33 U. S. C. 558, 571, 701, and 701k).

Obligations by activities

Description	1952 actual	1953 estimate	1954 estimate
Direct Obligations			
1. Executive direction and management:			
(a) Office, Chief of Engineers	[1] $1,651,877	$3,047,000	$2,600,000
(b) Division offices	[2]	6,050,000	6,000,000
2. Review boards:			
(a) River and harbor board	479,413	481,381	475,000
(b) Beach erosion board	108,210	122,240	108,000
3. Regulations:			
(a) Regulation of hydraulic mining on Sacramento and San Joaquin Rivers (California debris commission)	7,660	9,246	8,000
(b) Prevention of illegal deposits in New York harbor	470,996	425,178	375,000
(c) Miscellaneous inspections, issuance of permits, harbor lines, commercial statistics, etc. (contingencies)	1,634,624	1,253,953	1,200,000
4. Miscellaneous investigations	401,914	359,119	234,000
Total direct obligations	4,754,694	11,748,117	11,000,000
Obligations Payable Out of Reimbursements From Other Accounts			
1. Executive direction and management:			
(a) Office, Chief of Engineers (other Federal agencies)	515	300	
2. Review boards:			
(a) River and harbor board:			
(1) Corps of Engineers—military functions	9,534	9,700	1,000
(2) Other Federal agencies	10,072	10,300	1,000
(3) Non-Federal agencies	1,064	1,100	
(b) Beach erosion board (Corps of Engineers, military functions)	130,558	133,200	18,000
3. Regulation:			
(a) Prevention of illegal deposits in New York harbor (non-Federal agencies)	759	800	
(b) Miscellaneous inspections, issuance of permits, harbor lines, commercial statistics, etc. (contingencies) (non-Federal agencies)	17,700	18,700	2,000
Total obligations payable out of reimbursements from other accounts	170,202	174,100	22,000
Total obligations	4,924,896	11,922,217	11,022,000

[1] Represents obligations for Salaries, Office, Chief of Engineers only. Other expenses reflected under other appropriations and activities.
[2] Obligations incurred under this item during fiscal year 1952 are reflected under other appropriations and activities.

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Summary of Personal Services			
Total number of permanent positions		$1,797	$1,729
Average number of all employees		1,719	1,655
Average salaries and grades:			
General schedule grades:			
Average salary		$5,380	$5,380
Average grade		GS–7.8	GS–7.8
Crafts, protective, and custodial grades:			
Average salary		$2,860	$2,860
Average grade		CPC–3.2	CPC–3.2
Ungraded positions: Average salary		$2,810	$2,810
Personal service obligations:			
Pay and allowances to commissioned officers		$323,312	$323,312
Permanent positions		8,559,744	8,230,196
Regular pay in excess of 52-week base		32,795	31,924
Payments above basic rates		74,000	67,500
Total personal service obligations		8,989,851	8,752,932
Direct Obligations			
Personal services:			
Civilian		8,529,859	8,412,520
Pay and allowances to commissioned officers		323,312	323,312
Travel		500,000	1,053,000
Transportation of things		25,000	18,000
Communication services		100,000	172,300
Rents and utility services		250,000	191,000
Printing and reproduction		125,000	183,500
Other contractual services		1,135,796	280,820
Services performed by other agencies		50,000	
Supplies and materials		500,000	193,498
Equipment		200,000	163,500
Refunds, awards, and indemnities		550	550
Taxes and assessments		8,600	8,000
Total direct obligations		11,748,117	11,000,000
Obligations Payable Out of Reimbursements From Other Accounts			
Personal services: Civilian		136,680	17,100
Travel		4,750	500
Transportation of things		500	100
Communication services		1,500	200
Rents and utility services		2,500	500
Printing and reproduction		10,000	2,000
Other contractual services		7,000	600
Supplies and materials		11,000	1,000
Taxes and assessments		170	
Total obligations payable out of reimbursements from other accounts		174,100	22,000
Total obligations		11,922,217	11,022,000

STAFF AND ADMINISTRATIVE EXPENSES

Senator KNOWLAND. We will now consider general expenses.

General CHORPENING. This is a new appropriation in our budget presentation, a part of the overall change made this year in our budget.

Basically, the funds asked for here are to take care of the staff and administrative expenses of the Corps of Engineers to administer the civil works program, first in the Office of the Chief of Engineers in Washington, and then in our division offices in the field.

OTHER GENERAL EXPENSES

In addition to that, in this item of general expenses are funds requested for the operations of the River and Harbor Board; the Beach Erosion Board; and regulation items in connection with the California Debris Commission, a very small item; prevention of illegal deposits in New York Harbor, miscellaneous inspections, issuance of permits, and so forth, and miscellaneous investigations.

Now, this being a new item and estimated in a different manner than previously, we had no background, no really accurate background to measure what was required. We have prepared our budget request using our best judgment based on field information and information in my office as to those expenses which could not be pinpointed and defined and charged against specific projects. In other words, it is the best estimate of the overall expense of administering the program.

REMOVAL OF PERSONNEL CEILING

Now, last year for the first time the Congress removed the departmental ceiling from the Corps of Engineers and gave us some flexibility for the personnel in the Office of the Chief of Engineers The request this year is in line with that action and gives us an overall fund to administer the program both at the Washington level and in the field. It includes the salaries, travel, and other expenses involved. The funds in this part of our budget differ from the others in this respect, that they are 1-year funds. If we make savings here, they revert back to the Treasury. I am very hopeful that what we have here is adequate.

As I say, we have no background other than our best judgment as to our expenses in the past, by separating out what we consider overall administration from costs that should be charged to specific projects.

Senator ELLENDER. How did you carry this work before?

General CHORPENING. As far as the field was concerned, it was charged to specific projects. In other words, we prorated those expenses to the projects.

Senator ELLENDER. Out of the appropriation?

General CHORPENING. Yes, sir.

Senator ELLENDER. In this case you are asking separately?

General CHORPENING. Separately, and it gives the Congress, the Bureau of the Budget, and ourselves a better control of our expenses for administration.

Senator ELLENDER. It does not mean a reduction, however. I presume in the past in taking away from various projects you did spend as much as you were asking for?

General CHORPENING. That is correct. It is another means of showing the funds required and will enable all of us to know what we are spending for this particular function.

HOUSE COMMITTEE REPORT

Senator KNOWLAND. The House committee report on page 20 shows for general expenses the appropriation for 1953, $10,531,112; the original estimate, $11 million; revised estimate, $10,200,000; and

the House committee recommended $9,616,000, or a reduction under the appropriation for 1953 of $815,112.

Senator ELLENDER. In making the estimate have you deducted the amount carried here in a lump sum for carrying on this work in the division offices and everywhere else?

General CHORPENING. That is correct. It will just mean that we will get more work accomplished with the specific earmarked appropriations for projects because the expenses for administration which were previously charged against the projects will be paid out of the new appropriation. That has been taken into consideration in estimating requirements in 1954 for the various projects.

Senator ELLENDER. Have you estimated the amount of money that you so used last year? The House allowed you, as Senator Knowland just pointed out, $9,616,000. Now, what was the total that you expended last year in the same categories?

CURRENT OBLIGATION

General CHORPENING. We estimate that this current year, the best we could judge, our obligations will be $11,748,000. We will not know for another month and a half what our actual expenditures are for fiscal year 1953.

Senator ELLENDER. What comment have you to make on the House cut?

General CHORPENING. From the questioning there, I cannot determine why that cut was made, sir. I thought I made a good presentation. I thought I was very responsive to the questions asked by the committee. I have no intimation as to why they made that cut.

EFFECT OF HOUSE CUT

Senator ELLENDER. How will it affect your work?

General CHORPENING. It will affect us in this way: Assuming I have made, and I feel we have made, a very good estimate of our requirements, it is just going to mean that as we go along and if I am right we are going to have to lay off people or restrict some of our activities.

Senator ELLENDER. How will it affect you in pursuing projects for which you appropriated money?

General CHORPENING. Here is what I can visualize would happen, Senator: These funds include not only salaries but travel. Now, I keep a relatively small staff here but they are top people. They are people that I send out to the field very frequently. We have to get them out there to be of help to the field. It just follows if our funds are not adequate, I am going to have to cut down drastically on some of the very necessary inspections that are made.

DIFFICULTY ON FOLSOM DAM

For instance, we have had some difficulties, as I have testified here, on Folsom Dam. I have sent on several occasions 3 or 4 of my people ou there to aid in solving the problems on Folsom and other projects in the area. That costs money, but nevertheless they are the best people in my office on that kind of problem. It would restrict that

sort of proper executive control and inspection. That is what will happen.

Senator ELLENDER. Now, if this is done according to this new plan, even though you find it necessary to send somebody, as you have done to the Folsom Dam, you would be prohibited from using any of the moneys allocated for the construction of that dam for this purpose, that is, for the purpose of inspection.

General CHORPENING. I do not know whether the language is such that we would be prohibited, but certainly it is the intent that it not be done for the type of area inspections I have described.

Senator ELLENDER. Certainly, even though you are not prohibited, you would not want to violate the intent of the Congress in saying that you have here what you can spend for your division office and others on conducting the projects that we are asking you to go on with. Is that right?

ONE-YEAR FUNDS

General CHORPENING. That is right. These funds do not remain available until expended; they are 1-year funds. I shall as always make every effort to run this job efficiently and I would like to show some savings. I hope I can.

Senator ELLENDER. How much did you have last year to spend in contrast with what you have this year? You cannot tell until the Congress acts. I am just wondering, Mr. Chairman, how we can increase, what justification we will have other than maybe the expenditure of more money for more construction this year.

Senator KNOWLAND. Would that not have some relation, maybe not an exact one, but to some extent on the final determination of the Senate vis a vis the House as to the total amount of work to be done?

Senator ELLENDER. I wonder if you could place in the record the amount of construction and work you did this fiscal year so as to get percentagewise the amount that was utilized for your division offices and everything else so that we can use that as a yardstick to determine whether or not the $9,616,000 will be sufficient or whether you will need more.

General CHORPENING. That would be an estimate as of now.

Senator ELLENDER. What do you think percentagewise is the amount you have expended in the past for this kind of work?

General CHORPENING. I would say it runs about 2 percent, 2½ percent.

TOP-LEVEL PERSONNEL

I would like to point this out, that this being the top management, engineering, and staff control, it is obvious that it will not fluctuate in any direct proportion to the load going up or down. It is the staff that we require in my office and in the divisions to run our program, and unless we were going to have a very drastic reduction, down to say a third, and it looked like that rate was going to continue for several years, as a management matter, it would be unwise for the country to lay off two-thirds of these people.

True, we must be responsible, and we are, to some extent, to the load but I am trying to make the point that this is the real nucleus of our organization. They are top people in the divisions and in my office.

Of course, there are clerical people, too, but I means the bulk of these folks are real top-level personnel.

Senator KNOWLAND. We fully understand there will not be any exact ratio of percentage but you might figure out what this estimate is.

General CHORPENING. We will make our best estimate on it.

(The estimate referred to follows:)

It is estimated that the cost of all the general-expense items, of which our top administrative cost is only a part, will be approximately 2 percent of the cost of construction and other civil works activities carried on in fiscal year 1953.

NIAGARA POWER DEVELOPMENT

CLASSIFICATION SCHEDULE

Amounts available for obligation

	1952 actual	1953 estimate	1954 estimate
Appropriation or estimate		$100,000	$989,000
Prior year balance available	$172,553	35,957	
Total available for obligation	172,553	135,957	989,000
Balance available in subsequent year	−35,957		
Obligations incurred	136,596	135,957	989,000
Comparative transfer to "General expenses"		−1,565	
Total obligations	136,596	134,392	989,000

Obligations by activities

Surveys and investigations, Niagara redevelopment and remedial works investigation:	
1952	$136,596
1954	134,392
1954	989,000

Obligations by objects

Object classification	1952 actual	1953 estimate	1954 estimate
Total number of permanent positions	20	10	28
Average number of all employees	17	9	26
Average salaries and grades:			
General schedule grades:			
Average salary	$4,628	$4,669	$4,669
Average grade	GS–7.1	GS–7.1	GS–7.1
Personal services:			
Permanent positions	$75,309	$39,442	$117,399
Regular pay in excess of 52-week base	289	152	451
Payment above basic rates	3,095	1,500	3,000
Total personal services	78,693	41,094	120,850
Travel	7,461	2,500	7,500
Transportation of things	309	150	500
Communication services	463	50	100
Rents and utility services	1,542	150	300
Other contractual services	44,065	43,182	713,100
Services performed by "Revolving fund, Corps of Engineers"		46,266	136,150
Supplies and materials	804	900	10,000
Equipment	3,084		
Taxes and assessments	175	100	500
Total obligations	136,596	134,392	989,000

RESTORATION NOT REQUESTED

Senator KNOWLAND. The next item is the Niagara power development.

General CHORPENING. Since the budget was originally made up and then later revised, action has been taken by the administration, as indicated by the Bureau of the Budget, that the construction of Niagara power is not necessarily to be a Federal development. That being true, we have adequate funds available now to do what the Corps of Engineers must do in connection with the remedial works and any additional work that may be required, in working with the non-Federal agency, if that is the final decision. Therefore, these funds have not been allowed by the House and I am not requesting restoration of those funds by the committee.

Senator ELLENDER. How much do you have on hand?

General CHORPENING. We have as I recall about $90,000.

Senator ELLENDER. That is out of $100,000 we gave you last year?

General CHORPENING. Yes.

Senator ELLENDER. And you have enough?

General CHORPENING. We have enough to take care of it under the present situation.

CONSIDERATION OF BIDS

Senator KNOWLAND. We did request at one of our prior hearings some more information on the contracts relative to the bids, and so forth. You were going to present some information for the committee.

General CHORPENING. Yes, sir. That matter came up in connection with the question as to what the trend has been in our bids. What I have done is considered those bids received between October 1, 1952, and April 1, 1953—that is a 6-month period—and I have limited the contracts to only those in excess of $1 million, to keep the study to a reasonable number. It developed that in that period of 6 months we had actually advertised and awarded 18 contracts over $1 million.

I may say that these contracts cover jobs pretty well dispersed all over the country. It has worked out that way. Likewise, they involve various kinds of construction, such as powerhouses, earthwork, concrete-revetment fabrication down on the Mississippi River, lock construction, a pretty good overall sample of our work.

Senator ELLENDER. Why did you select that period?

General CHORPENING. That was the most recent period.

Senator ELLENDER. And most completed?

General CHORPENING. Yes, sir. In other words, we wanted to get what was the trend.

Senator ELLENDER. You wanted to get the actual, too?

GOVERNMENT ESTIMATE FOR BID PURPOSES

General CHORPENING. Yes.

Now, I think it is rather interesting to give you these data. In our project estimates presented to Congress with the 1953 budget, the work covered by these 18 contracts, was estimated to cost approximately

$104 million. The Government estimates subsequently prepared for bid purposes totaled $98,600,000, and the low bids received totaled $96,500,000. In other words, you can see that on those 18 contracts there has been a distinct trend downward from what our estimates were last year.

Senator ELLENDER. There were trends in two ways, your original estimates and what your estimates were and what the bids were.

General CHORPENING. Yes. The committee may wonder why we are getting lower bids than our estimates. It must be remembered that in making our own estimates we must allow full plant rental for all items such as trucks, concrete mixers, and all the other equipment that contractors put on the job. But contractors can bid and place little or no money in their bid for that rental. Maybe they have written it off pretty well. That accounts for some of that difference. But in general the trend is downward.

Now, the question will be asked, have we reflected this in our own estimates this year. I might point out as we testified on the Dalles Dam, that we did not increase the estimated cost this year over last year but we did include the $23 million that we estimate will be paid to the Indians in the present estimated cost. So in effect we have reduced that estimate by $23 million for the construction of the project.

Lucky Peak, another project, we reduced the estimate this year nearly 3 million. You will recall that Chief Joseph Dam, although it was not one on which any of the 18 contracts was let, we reduced the estimate, about $12 million.

RESPONSIVENESS TO TREND

So I think we have been responsive in our estimates to this trend. We hope the trend will continue and that we can be more responsive and report good news to the Congress next year.

Senator ELLENDER. General, as I understood you, on those 18 projects, the amount that you asked from Congress to construct them was $104 million.

General CHORPENING. That was the amount included in our estimated costs for the projects in fiscal 1953.

Senator ELLENDER. That is what you presented to the Congress?

General CHORPENING. Yes.

Senator ELLENDER. And your contracts were actually let for $96,500,000, which means a saving of $7,500,000.

General CHORPENING. Yes, sir.

Senator ELLENDER. What became of that?

General CHORPENING. You take for instance on contracts that we let on the Mississippi River. That just enables us to do more work.

Senator ELLENDER. So you used it?

General CHORPENING. The part of the total that was appropriated, yes, sir, to get more work for the same amount of money.

Senator KNOWLAND. You got more for your money?

Senator ELLENDER. I understand, but the project was really extended then from what you had asked for?

General CHORPENING. Yes.

CLOSING OF HEARING

Senator KNOWLAND. I think that completes the hearing unless you have anything else to offer, General. Otherwise, the hearings are closed on this bill. The record will remain open through Friday for any statements that should go into the record.

It is the intention of the chairman to have the bill marked up sometime around the second week in June or immediately thereafter.

General CHORPENING. Mr. Chairman, in a very few days we will send to the committee or place in the hands of Mr. Bousquet formal appeals on those items that the House reduced or did not allow but which we feel we should ask the Senate to consider restoring.

Senator KNOWLAND. That is after the House action?

General CHORPENING. Yes.

Senator KNOWLAND. Of course, they may do something on the floor that may change the picture.

The following statements were subsequently filed for the record:

Table of benefit-cost ratios for construction projects in fiscal year 1954 revised budget estimate

Project	Benefit-cost ratio	
	At time of authorization	Present
1. Demolopolis lock and dam, Alabama	1.18	1.27
2. Arkansas River and tributaries, Arkansas and Oklahoma (bank stabilization and channel rectification)	1.08	1.16
3. Blakely Mountain Reservoir, Ark	1.49	1.37
4. Bull Shoals Reservoir, Ark. and Mo	1.57	1.90
5. Red River levees and bank stabilization below Denison Dam, Ark., Tex., and La	[1] 1.12	1.61
6. Cherry Valley Reservoir, Calif	[1] 1.9	[1] 1.2
7. Folsom Dam, Calif	1.2	1.6
8. Los Angeles County drainage area, California (exclusive of Whittier Narrows Reservoir)	1.55	2.35
9. Pine Flat Reservoir, Calif	2.3	2.5
10. Sacramento River, Calif	[2]	[2]
11. San Antonio Reservoir, Calif	[1] 1.08	[1] 1.03
12. Whittier Narrows Reservoir, Calif	1.1	1.19
13. Central and southern Florida (1st phase)	2.23	4.03
14. Jim Woodruff lock and dam, Florida and Georgia	[1] 1.08	[1] 1.24
15. Buford Dam, Ga	[1] 1.08	[1] 1.24
16. Clark Hill Reservoir, Ga. and S. C	2.26	2.21
17. Albeni Falls Reservoir, Idaho	2.65	2.53
18. Lucky Peak Reservoir	1.2	1.44
19. Degognia and Fountain Bluff Levee and Drainage District, Illinois	3.4	2.1
20. East St. Louis and vicinity, Illinois	21.6	11.3
21. Grand Tower Drainage and Levee District, Illinois	[2]	1.37
22. Mississippi River, between Missouri River and Minneapolis, Minn., Ill., Iowa, and Mo	[3] 1.12	[3] 1.5
23. North Alexander Drainage and Levee District, Illinois	2.8	[1] 1.2
24. Wilson and Wenkel and Prairie du Pont Drainage and Levee District, Illinois	2.4	1.4
25. Wood River Drainage and Levee District, Illinois	2.56	1.5
26. Vincennes, Ind	1.11	4.8
27. Coralville Reservoir, Iowa	[1] 1.1	1.74
28. Lock No. 19 at Keokuk (see Mississippi River between Missouri River and Minneapolis, Minn.)		
Missouri River, Kansas City to Sioux City:		
29. Kansas City to Omaha	[2]	[4] 1.9
30. Omaha to Sioux City	[2]	[4] 1.9
31. Hutchinson, Kans	.83	1.60
32. Kansas City's, Kans. and Mo	3.95	2.78
33. Missouri River agricultural levees, Kansas, Iowa, Missouri, and Nebraska	1.60	1.36
34. Wichita and Valley Center, Kans	.38	1.15
35. Covington, Ky	3.3	1.3
36. Louisville, Ky	7.6	2.6
37. Maysville, Ky	1.0	1.37

See footnotes at end of table.

Table of benefit-cost ratios for construction projects in fiscal year 1954 revised budget estimate—Continued

Project	Benefit-cost ratio	
	At time of authorization	Present
38. Pineville, Ky	1.56	1.65
39. Natchitoches Parish, La	2.33	1.30
40. Baltimore Harbor, Md	[2]	2.39
41. Cumberland, Md. and Ridgely, W. Va	1.00	1.25
42. Adams, Mass	.42	1.43
43. Fall River Harbor, Mass	2.1	2.2
44. North Adams, Mass	1.0	1.31
45. Red River of the North, S. Dak., N. Dak., and Minn	1.78	1.44
46. Missouri River, Kansas City to mouth, Missouri	[2]	[4] 1.9
47. Perry County Drainage and Levee Districts, 1, 2, and 3	2.50	1.43
48. Havre, Mont	2.0	2.9
49. Gavins Point Reservoir, Nebr. and S. Dak	[1] 1.60	1.18
50. Missouri River, Kenslers Bend, Nebr., to Sioux City, Iowa, Nebr. and S. D	[2]	1.6
51. Rio Grande Floodway, N. Mex	1.2	1.22
52. Corning, N. Y. (Monkey Run only)	1.8	2.05
53. John H. Kerr Reservoir, N. C. and Va	1.35	1.39
54. Garrison Reservoir, N. Dak	[1] 1.60	1.4
55. Cleveland Harbor, Ohio (1946 authorization)	1.06	2.12
56. Oklahoma City Floodway, Okla	[1] 1.02	[1] 1.16
57. Tenkiller Ferry Reservoir	[2]	1.28
58. Amazon Creek, Oreg	2.03	1.52
59. Lookout Point Reservoir, Oreg	[2]	1.35
60. McNary lock and dam, Oregon and Washington	2.02	1.69
61. The Dalles Dam, Oreg. and Wash	1.25	1.55
62. Willamette River, bank protection, Oregon	[1] 1.65	1.4
63. Monongahela River, locks 2, Pennsylvania	[2]	[1] 3.6
64. Schuylkill River above Fairmount Dam, Pa	1.08	1.63
65. Swoyersville-Forty Fort, Pa	[1] 1.8	[1] 4.08
66. Williamsport, Pa	[2]	2.3
67. Fort Randall Reservoir, S. Dak	[1] 1.60	1.70
68. Oahe Reservoir, S. Dak	[1] 1.60	1.42
69. Cheatham lock and dam, Tennessee	{ [5] 3.14 / [5] 1.55 }	1.65
70. Old Hickory lock and dam, Tennessee	1.56	1.67
71. Memphis, Wolf River and Nonconnah Creek, Tenn	[2]	2.52
72. Belton Reservoir, Tex	1.04	2.22
73. Dallas Floodway, Tex	[1] 2.44	[1] 2.53
74. Fort Worth Floodway, Tex	[2]	[1] 1.49
75. Garza-Little Elm Reservoir, Tex	[2]	[1] 2.53
76. Colorado River locks, Texas	[2]	1.5
77. Texarkana Reservoir, Tex	[1] 1.12	1.56
78. Chief Joseph Dam, Wash	1.55	2.48

[1] Separate benefit-to-cost ratio not available. Figure shown is for a combination or an overall plan involving additional projects.

[2] Not computed.

[3] Benefit-to-cost ratio at time of authorization is for canalization project between Missouri River and Minneapolis, Minn., including lock 19. Present benefit-to-cost ratio includes small-boat harbors in addition to canalization project.

[4] For entire project from Sioux City to the mouth.

[5] The benefit to cost ratio of 3.14 is for the navigation project for the Cumberland River below Nashville, Tenn. The benefit-to-cost ratio of 1.55 is for the power installation authorized by Public Law 396, 82d Cong., 2d sess., approved June 19, 1952.

(The information requested on page 352 is as follows:)

QUINBY CREEK, VA.

Enlargement of the present turning basin in Quinby Creek to a depth of 4 feet and an area of 200 by 400 feet could be accomplished for approximately $25,000.

SUPPLEMENTAL STATEMENT OF SENATOR STUART SYMINGTON OF MISSOURI ON FLOOD-CONTROL AND POWER DEVELOPMENT PROJECTS IN MISSOURI

Mr. Chairman and members of the committee, I appreciate the opportunity to make this additional statement on behalf of vital flood-control and flood-protection projects affecting my State and neighboring States including the levees

on the Mississippi River at Cape Girardeau, Mo., Table Rock Dam, Tuttle Creek Dam on the Blue River in Kansas, and agricultural levees along the Missouri River north of Kansas City.

The great need for these projects prompts me to urge that this committee include these measures in the Army civil-functions appropriations bill.

I have noted with particular concern the failure of the House to include in the Army civil-functions bill the funds needed to construct the levees and flood walls at Cape Girardeau, Mo.

Cape Girardeau is the largest city on the west bank of the Mississippi River between St. Louis and New Orleans.

The flood stage there is 32 feet. In the 100 years prior to 1943 the river exceeded 38 feet only 3 times. In 7 of the 10 years since 1943 there have been major floods. In 6 of these years the water exceeded 38 feet.

In view of the increasing flood danger and the fact that Cape Girardeau is totally without flood protection, it is imperative that the levees and flood walls be built without delay.

Other vital projects left out of the civil-functions bill in the House are Table Rock Dam, Tuttle Creek Dam, and agricultural levees on the Missouri River above Kansas City.

Table Rock Dam in southwest Missouri is needed for both flood protection in the White River Basin and for power production. This project meets every criterion laid down by the President in his state of the Union message, February 2, in that it is soundly planned and already initiated. In conjunction with Bull Shoals Dam it would control White River floods, and would add to the available power in an area where the demand for electricity is steadily increasing.

Completion of Tuttle Creek Dam in Kansas would help protect the immense agricultural and industrial areas of the Kaw River Valley. Another flood, comparable to that of 1951 in the Kansas City area, could cost 10 times as much as this dam. Loss in income taxes to the Federal Government in the 1951 flood was far more than the cost of this dam.

Agricultural levees in the Tarkio-Squaw Creek district in northwest Missouri are also sorely needed. Unless these levees are constructed, some of the richest and most productive farmland in America will continue to be subjected to periodical devastation.

In view of the great need for these projects, I again urge that sufficient funds be appropriated that they may be continued.

SUPPLEMENTARY STATEMENT OF HOWARD E. MUNRO, LEGISLATIVE REPRESENTATIVE, THE CENTRAL LABOR UNION AND METAL TRADES COUNCIL OF THE PANAMA CANAL ZONE

I would first like to thank the subcommittee for the opportunity allowed me to present this statement pointing out the disastrous effects of H. R. 5376 as passed by the House of Representatives on May 27.

SECTIONS 103 AND 107

Section 103, among other things, states in (5) (b): "May receive as compensation equal rates of pay based upon rates paid for similar employment in continental United States, plus 10 percent."

The language of this section has been the same for many years in appropriation bills, except formerly it stated plus 25 percent.

Section 107 is a new section which also limits the amount, not to exceed 10 percent, which can be paid, above wages paid by the Government in continental United States for the same or similar services.

These two sections will accomplish the same thing. That is, to reduce the salary of the Federal worker on the Canal Zone 12 percent. Based on the total payroll and employment, the average annual cut in salary will be $728 per employee.

This is the third drastic reduction in income given these Federal employees by Congress in 2½ years.

Public Law 814, 81st Congress, made income tax applicable on the Canal Zone for the first time. This is a reduction of between 10 and 18 percent, depending on the marital status.

Public Law 841, 81st Congress, placed in effect a new accounting system for the Panama Canal Company. This was the object of my testimony before the

committee on March 27, 1953. This is a reduction of approximately 10 percent, depending on living habits and housing.

H. R. 5376 if enacted into law would result in a reduction of 12 percent.

The total reduction would be between 32 and 40 percent. This is in addition to the normal increased cost of living for all United States citizens during this period.

With the exception of the above-mentioned extra increased costs, the normal increase applied equally in the United States and on the Canal Zone has been compensated for by wage increases in the States which were reflected into wage increases given on the Canal Zone.

At a time when wages generally are rising, a reduction of between 32 and 40 percent is unbelievable, but Congress has placed part of this on the Federal employees on the Canal Zone and is now considering the balance.

It is apparent that the Congress has not thoroughly investigated this matter. I base this statement on the following:

1. In answer to Congressman Allen of California's question as to whether an investigation of the proposed reduction of 15 percent was fully determined and fully heard, Congressman Hand replied: "As far as our subcommittee is concerned, we feel that we gave the problem a great deal of careful attention. * * * I am not aware of any other general hearings that have been held on the overall subject. * * *"

2. The testimony on page 30 of the House civil-functions hearings contains confusing statements by the General Accounting Office witness on premium salary. My observations on this testimony are that both yes and no answers were given. However, the statement made by Mr. Newman and I quote, "The point is that it is true that there are a lot of fringe benefits which the employees have been getting, which deserve the consideration of the Congress, in order to establish a policy for the future" apparently indicates that they are confused on the whole issue.

3. The testimony on pages 91 and 92 of the House civil-functions hearings covers the Canal Zone cost of living as interpreted by the Governor and Comptroller of the Company. Such quotes by the Governor will be found here:

"Mr. Chairman, I am sure if you had time to investigate for yourself or have any group you would desire, you would find our cost of living is quite comparable to that here. Our commissaries are not cheaper than the States. They are just not.

"I can make this statement, and I am sure I am entirely correct: If there is any advantage in anything in the Canal Zone in the cost of living it may be rents, but we think now in comparison that we are on an equitable level with the States. All other things, I assure you, cost you more."

The Comptroller states:

"In addition, Mr. Chairman, there are a good many hidden costs, which employees have to pay as a result of living in the Tropics.

"You have to get out of the tropics at least every 2 years. It costs money to take yourself and your family to and from the States and live while you are in the States.

"I have found just from the time I have been there that there are many hidden costs to which an employee is subjected that do not appear on the surface and that makes quite a difference to the individuals concerned."

4. The testimony given before this committee by Mr. Mathew Robinson of the Board of Directors to the effect that he was all for eliminating the 25 percent until he was on a committee to investigate this phase of the Company operation. After he had completed the investigation, his opinion was the reverse.

5. An impartial committee referred to previously as the rent panel stated in their recommendation among other things:

"There has been a certain whittling away over the years of the special treatment traditionally accorded to United States-rate employees doing vital work on the zone; and it would appear that further invasion should not be made by indirection and without deliberate consideration of their effect."

6. Last, but not least, my testimony before this committee and the House committee which can be summed up as "We believe an analysis of this material will prove that the 25 percent is possibly inadequate and that without a doubt should be paid to all United States citizens on the isthmus."

I would like to point out where the application of these two sections will discriminate against the United States citizen if passed. There are Panamanian citizens already employed by our Government on the Canal Zone and they are sub-

ject to the United States Civil Service regulations, and also the Classification Act of 1949, which sets rates of pay. Such Panamanian citizens do not pay income tax on moneys received from the United States Government, while all United States citizens employed on the Canal Zone are required by law to do so. This will result, in case the differential is reduced from 25 percent to 10 percent, in Panamanian citizens receiving larger incomes than American citizens doing identical work.

Here is one of many examples which might be quoted: Mrs. Miller, a United States citizen, is a GS–4(b). Her salary will be $3,255, plus the 10 percent, or $3,580.50.

Miss Oller, a Panamanian citizen, working alongside Mrs. Miller, doing the same work, is also a GS–4(b). Her salary is $3,255 (Panamanian citizens paid at the United States rate do not receive any differential).

Mrs. Miller pays income tax of $596 which reduces her income to $2,984.50, while Miss Oller, a Panamanian citizen, will receive the full $3,255, or $270.50 more than a United States citizen for the same work.

This is also true regarding all craft positions and all other positions.

Another point which should be taken into consideration is the method used to obtain the craft rates on the Canal Zone.

The average of the nine naval shipyard maintenance rates are used as a base for Canal Zone rates, regardless of whether maintenance or construction work is done. The table on page 125 of part I of the House hearings will give a clear picture of how the so-called differential is applied to the construction trade.

Construction trade	District of Columbia rate	Canal Zone rate	Republic of Panama rate
Carpenter	$2.87½	$2.45–$2.55	$2.50–$2.75
Bricklayer	3.30	2.55– 2.67	2.50– 2.70
Painter	2.67	2.37– 2.46	2.45– 2.75
Tile setter	3.12½	2.48– 2.57	2.45– 2.80
Plumber	2.90	2.50– 2.59	2.75

For the construction trades mentioned, the United States citizens on the Canal Zone are making less than the Washington, D. C., scale. The United States plumbers are even making less than plumbers are paid in the Republic of Panama. Where is there any differential in these rates?

The table following applies to the Navy yard bench-mark trades (electrician, machinists, etc.) fourth step.

Yard	*Rate*
Portsmouth, N. H	$1.95
Boston, Mass	2.13
Los Angeles, Calif	2.16
Philadelphia, Pa	2.17
Charleston, S. C	2.17
New York, N. Y	2.19
Portsmouth, Va	2.19
Bremerton, Wash	2.30

The Canal Zone rate for these positions, if the bill is enacted as now written, will be $2.40 which will not be 10 percent above the rates paid in New York, Portsmouth, Va., or Bremerton, Wash.

The present Washington, D. C., Navy rate is $2.26 per hour. Under the proposed 10 percent differential, the Canal Zone rate will be 9 cents per hour less than the Washington rate, plus 10 percent.

RECOMMENDATION

On line 15, page 13, delete 10 and in its place put 25 and delete section 107.

The employees heartily believe that under the present accounting system a 25 percent override is insufficient to cover the costs which the GAO desire to collect from the employee. Therefore, a committee should study and make recommendations on what the employee is expected to pay so that the wages can be adjusted accordingly.

Also in fairness to the employee, no reduction in the established differential should be made until this study is completed.

SECTION 106

The House report on this section states in part:

"The threat of yellow fever and other tropical diseases that prompted issuance of the order in 1914 has been removed. * * * The committee will expect new medical tariffs to be promulgated at once to more properly reflect the costs of such services as well as the ability of the employees concerned to bear these costs."

I covered the effect of any increased medical charges in my testimony before this committee on March 27. I can agree with the yellow fever part of the House committee's report but cannot agree with the other tropical diseases nor can I find it mentioned in the printed hearings.

However, I did find this statement made by Mr. Newman, the GAO witness: "Coming back to employees again, in view of the position of your committee last year to try to eliminate subsidy from the rents, we have a similar situation in the hospitals. * * * In our studies of it we feel company employees should be paying in some way for the cost, like a hospital plan, like you and I may have * * * and we feel some sort of a plan like that should be adopted to do away with subsidizing employees completely."

Mr. Eckert of the GAO stated: "Insofar as this hospitalization is concerned as to whether there should be a plan, frankly, that is really a matter of policy."

Mr. Newman also stated: "It is a policy for the Congress."

Congressman Davis stated: "I think this committee probably will express its opinion."

The committee went further than expressing its opinion. This section, if based on this premise, is legislation and rightly belongs to a legislative committee.

RECOMMENDATION

If it is the intention of the GAO and the House Appropriations Committee to eliminate all subsidizing of employees, it is our belief that the entire subject should be analyzed at one time and all corrective measures taken at once. This way the employee will not be bled white and left on the beach. Therefore, this section should be deleted until the question of all subsidizing of employees and wage differentials be thoroughly studied and recommendations made which take into consideration all phases of United States employees on the Canal Zone. As it now stands, it only increases the cost of living of the employee.

SECTION 108

This section, except for the two top officers, prohibits the payment of salary in excess of military pay regardless of the work assigned.

While it appears a simple procedure, it will create many personnel problems if allowed to stand as written.

The result will be one of two things: (1) It will drive out the military personnel from the top positions, or (2) it will cause a general reduction in all civilian positions under these men. No enterprise can function satisfactorily where the subordinate receives more compensation than his superior.

The positions on the Canal Zone are allocated to the GS schedule of the Classification Act by civil-service regulations. If the military man fails to receive his salary in accordance with the GS schedule, he will be discriminated against as his subordinate will be so classified.

If the military man receives only his military salary and the civilians under him are downgraded accordingly, the civilians will be discriminated against and in the Canal Zone Government positions, there is the question of statute.

RECOMMENDATION

There are two satisfactory answers to this problem:

(1) Delete section 108 or (2) amend section 108 to read:

"SEC 108. No part of any appropriation contained in this or any other Act, including funds of the Panama Canal Company shall be available hereafter for payment of military personnel assigned to the Panama Canal Company or the Canal Zone Government: *Provided*, That this section shall not apply to those officers serving as Governor of the Canal Zone and President, Panama Canal Company and as Lieutenant Governor of the Canal Zone and Vice President of the Panama Canal Company.

If a person is doing a job, he should be paid for it and not discriminated against because he is in the armed services. If conditions are such that it is undesirable to pay him for the work he is required to perform, he should be prohibited from holding the position.

RECOMMENDATION MADE IN ORIGINAL STATEMENT

This recommendation was not accepted by the House committee. In fact, they took a position exactly opposite.

From the testimony given at the hearings, it was the apparent intention of the House committee to eliminate an alleged subsidy to the United States rate housing project.

The rent question was investigated by a disinterested committee and recommendations made. They did not agree with the House committee's interpretation of "reasonable." Therefore, there appears in the House report: "Unwarranted action by the Secretary of the Army in the appointment of a rental panel to hold hearings and make recommendations * * * " also "The committee, to put it mildly, is disgusted with the weak-kneed delayed action of the Board of Directors of the Company."

The General Accounting Office in the House hearings state: "There are individuals representing certain groups who get up in arms if you try to do something, and you cannot do anything. That comes back to getting competent management—people who know how to handle employee and public relations in that type of work. This is a business enterprise."

We agree that the Panama Canal Company is a business enterprise. Their business is to put ships through the canal. They are not in the real estate business. The housing is incidental to putting ships through. The company did not lose $53,000 in fiscal year 1952. The Company made money and is doing so this fiscal year. Neither the intent of circular A–45 nor the Comptroller General decision (5 Comp. Gen. 236) will be complied with if the Company collects an all-cost rental base. Here again, we have a statement made by Mr. Newman which can be interpreted, "If you don't agree with me, you are incompetent." Mr. Newman admits a 2-year experience on the Canal Zone. The management has had at least 39 years of tropical experience. It would be beneficial if private business practices followed by United States companies outside continental United States be studied before the Panama Canal Company management is criticized.

The GAO made the following statement before the House committee: "Surprising as it looks, it is hard to find anyone that is paying 10 percent of his income for rent (7.4 percent is the median rent), even where there is only one breadwinner in the house under the January 4, 1953 rent schedule."

With the reference to "one breadwinner in the house" does it imply that the GAO is interested in setting up standards whereby the wife must work for the family to obtain sufficient income to live? If that is their intent, they have reached their goal.

This is an example of one of the increased costs placed on the employee as mentioned under sections 103 and 107.

RECOMMENDATION

The following section should be added to the bill:

Add a section: "Notwithstanding any other provision of law to the contrary no charges shall be allocated to the Panama Canal Company's 'Employee service activity' for (1) administrative and general expense; (2) employment costs; (3) depreciation; (4) interest; (5) cost of Canal Zone Government."

The effect of this amendment would prevent additional expenses from being placed upon the employee while at the same time his salary is being reduced.

GENERAL STATEMENT

Negotiations have been scheduled between the Republic of Panama and the State Department for reconsideration of the treaty regarding the Canal Zone.

A newspaper item in the Panama American dated May 8, 1953 stated in part: "Reliable United States sources said today that equitable treatment of Panamanians employed in the Canal Zone will be the principal item on the agenda of next month's Panama-United States talks here." "Qualified informants said that the 'real meat' of the talks will deal with Panama's distaste for the United States Government practice of dividing its employees into 'United States-rate'

and 'local-rate' categories." "Some discrimination against Panamanians in filling nonsensitive jobs is also alleged."

"The basis for the discussion of employment practices will be an annex to the 1936 Panama-United States treaty which provides for equitable treatment of Panamanian employees in the Canal Zone, according to the informants."

"They said that the United States will be prepared to discuss interpretation of the treaty and measures to achieve better fulfillment of the employment and other provisions of the pact."

There was also considerable discussion in the House hearings regarding replacing the United States citizen with alien labor. One example was given comparing 65 cent local rate labor with $2 per hour United States rate labor.

The replacing of United States citizens with alien workers can have many complications. The statement that it is cheaper to use alien workers than United States citizens, on the basis of 65 cent labor versus $2 per hour labor, is not in keeping with good American tradition. It has always been a United States practice of equal pay for equal work. I believe the committee should evaluate the subsidies to aliens and our obligations to our own citizens before they place too much weight on such comparison. The insurance of having a sufficient number of American citizens on the Canal Zone to fulfill its requirements should also be considered. There are many Members of Congress who will uphold the principle of keeping the Canal "American." However, if it's a matter of cost, Mongolian labor may be cheaper.

United States citizenship is a prerequisite for Federal positions in the United States. Why is it the apparent policy of the Panama Canal Company to replace United States citizens with aliens? The people who are being replaced are your constituents and are entitled to a satisfactory answer. Are they being replaced in the guise of economy so that some other Federal employees can boast of the money they saved? We seriously question if it is economy to replace United States citizens with aliens on such a costly and vital enterprise as the Panama Canal.

Should there be any change in employment policy as a result of these discussions the complications of sections 103 and 107 of this bill will be greatly magnified.

The additional expenses being placed on the employe in addition to the reduction of income of the employee have created a serious problem for the United States citizen on the Canal Zone. If it is the intent to drive the United States citizen out of the Canal Zone so his position can be filled by alien workers, this bill in its present form will accomplish this purpose. However, I desire to point out that it will be the young highly-skilled worker who will leave, which will creat a serious management problem.

During the hearings comparison was made of the Company-Government turnover rates. Turnover is higher in United States because of many reasons. There are job opportunities in United States which are always available. This increases turnover as it allows a person to be on the lookout for a better job. Also if a job is not satisfactory, another can be obtained. The only inconvenience is a new streetcar route or different hours. In the Canal Zone you lose all job contacts. There are no other jobs available. You sign a contract to reimburse the company for all expenses if you stay less than 1 year. If you stay longer than 1 year you agree to pay your own expenses back to the United States. In order to get your expenses paid both ways, you must stay 2 years. This cuts down turnover for the 2-year period. It will give a much better picture if a comparison is made with the so-called normal year 1938. The following figures were taken from the Governor's annual reports and include only resignations; voluntary retirement has not been considered.

Fiscal year ending June 30	Resignations	Percent	Average aggregate force
1931	164	4.9	3,331
1932	167	5.0	3,292
1933	101	3.2	3,111
1934	215	7.1	3,028
1935	125	4.2	2,934
1936	104	3.2	3,166
1937	143	4.2	3,364
1938	165	4.8	3,393
1939	136	3.9	3,456
1951	766	17.8	4,287
1952	429	10.0	4,261

The estimated average cost for transportation one way for an employee and family is $600. This does not include hiring costs nor breaking in on the job. At an average cost of $1,200 per turnover, the turnover rate must be kept low. Since the advent of the income tax, and the new accounting procedure, the turnover has more than doubled and the first 2-year contracts are just beginning to expire.

Panama Canal voluntary turnover is now more than double that of the so-called normal years. I cannot predict the results of this bill if enacted in its present form.

Recruitment and repatriation is expensive outside the continental limits of the United States.

I will be glad to appear before this committee at any time to answer questions or present any supporting data.

DULUTH-SUPERIOR HARBOR, MINN. AND WIS.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., May 25, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee,
United States Capitol, Washington, D. C.

DEAR SENATOR BRIDGES: I would like to file the following statement pertaining to the reinstatement of a $615,000 item for the Duluth-Superior Harbor in the current civil functions appropriation bill.

I request and will appreciate every consideration given by the Senate Appropriations Committee for the reinstatement of $615,000 in the current budget for dredging most seriously needed in the Duluth-Superior Harbor. This item was in the budget presented in January and was removed in the revised budget. This work was authorized by the 82d Congress in Public Law 568, and it was passed as an emergency measure at that time necessary to the national defense and safety of our country. The project is in accordance with the recommendations of the Chief of Engineers as contained in House Document 374, 82d Congress, and provides for the deepening of the Superior Front Channel and part of the East Gate Basin Channel to a depth of 25 feet—both of which now have a depth of 22 feet. All other parts of the harbor are at 25 feet.

An emergency existed last year following a strike in the steel industry when this deficiency in the Duluth-Superior Harbor became apparent. All ore boats loaded at Superior must lighten their load by 3,500 tons. All the other harbors on the Great Lakes have a depth of 25 feet. This means that the boats that load and unload at Superior lighten their loads by 3,500 tons. This, of course, applies to all commodities, but the seriousness of the situation became apparent only because of the steel strike. After the strike, iron ore could not be furnished as rapidly as it should be. Almost all boats now draw 25 feet of water.

Superior-Duluth Harbor is the largest inland harbor, and of coastal and inland it is second only to New York. It has an average yearly tonnage of 73 million, mostly iron ore. About 10 million more tons are shipped from the Superior side than from the Duluth. Despite the fact that this harbor is second only to New York in amount of tonnage, it is one of the most cheaply operated harbors in the entire country.

Unless we are now facing an era of peace, this project is just as much of an emergency now as it was in the 82d Congress when Public Law 374 was passed as an amergency measure. I dread to think of what this loss in tonnage of 3,500 tons per ships will mean to us in another world conflict. To sacrifice our proper defense for a mere $615,000 is inconceivable to me, in view of the fact that 80 percent of our iron ore is shipped through this harbor. In last year's civil functions appropriation bill of over one-half billion there was not a single item for Wisconsin, and again in this year's bill of nearly one-half billion there is not one item for Wisconsin. This in spite of the fact that Wisconsin is a State where much of its industry depends upon good harbors.

Despite this fact that Wisconsin has no project in the current appropriation bill, this request is not made on that basis in any way. This request is based on the importance of this one little item to the defense of our Nation.

Respectfully submitted.

ALVIN E. O'KONSKI, M. C.,
10th District of Wisconsin.

CORNING, N. Y.

STATEMENT OF SENATOR IRVING M. IVES IN RELATION TO APPROPRIATION OF FUNDS FOR THE MONKEY RUN CREEK FLOOD-CONTROL PROJECT, CORNING, N. Y.

I am submitting this statement to your distinguished group to urge approval of the recommended funds for the flood-control project on Monkey Run Creek at Corning, N. Y. A request in the amount of $985,000 for this important project is contained in the revised budget estimates for civil works, Corps of Engineers. It is not a new project and its completion is vital to the national defense effort.

I further submit for your consideration a memorandum received from Mr. Horace S. Evans, executive director, New York State Flood Control Commission, clarifying a number of points raised in the report of the House Committee on Appropriations on the civil functions, Department of the Army, appropriation bill, fiscal year 1954, and a telegram received from Mr. W. A. Underhill, publisher of the Corning Leader.

MEMORANDUM: APPROPRIATION FOR MONKEY RUN CREEK FLOOD-CONTROL PROJECT, CORNING, N. Y.

By: New York State Flood Control Commission through United States Senator Irving M. Ives.

To: United States Senate Committee on Appropriations.

This memorandum is a formal request that your distinguished committee include in the Army civil functions appropriation bill funds in the amount of $983,000 for prosecution of the flood-control project on Monkey Run Creek at Corning, N. Y. Funds in this amount were recommended to the House Appropriations Committee by the Federal Budget Bureau.

The House Appropriations Committee in its report on the Army civil functions bill stated:

"The committee has denied the request of $985,000 for work on the Monkey Run feature of the local protection project at Corning, N. Y. Sufficient funds remain available from the 1953 appropriation to carry out a realistic construction program in 1954. This feature of the Corning project is of dubious Federal significance, most of the benefits accruing to one industry. The local interests here, in addition to providing the usual lands and rights of way and agreeing to maintaining the project after completion, are called upon to make a cash contribution of $250,000 or an equivalent amount in construction work toward the completion of the Federal project presently estimated to cost $5,237,000. This cash contribution has not been increased since the time of authorization despite a sharp increase in Federal costs. No funds should be obligated on this project and the committee will entertain no estimate for continuation of construction until this lump sum contribution has been adjusted in conformity with the increased costs to the Federal Government."

The Corning flood-control project consists of two sections: a primary project and the Monkey Run creek project. For purposes of clarity this memorandum is concerned only with the Monkey Run section of the Corning flood control project. The primary project was authorized in the 1936 Federal Flood Control Act and construction was completed in 1942 at a total cost to the Federal Government of $2,160,000. Non-Federal costs, borne by the State of New York as the local interest, were $270,000. As authorized in 1950, Federal costs of the Monkey Run section of the project were estimated at $2,370,000 net and costs to the State, acting as local interest, were estimated at $610,000, the latter including the $250,000 contribution item.

A review of current estimates discloses that the House committee is in error as to present-day costs of the project and further as to an increase in Federal costs. Whereas Federal estimated costs actually have decreased since authorization of the project in 1950, estimated State (the local interest) costs have increased. The current estimated net Federal cost is $1,880,000 and the current estimated State cost is $711,100. Federal costs have been decreased $490,000 and the State costs have increased $101,100.

Should the reasoning implied in the House Appropriatons Committee report be followed to conclusion, then the $250,000 contribution should be reduced. As a matter of fact, it is not the contention of the State that this contribution be reduced since it was established in 1950 as a just and equitable amount in the

wisdom of the Congress then considering the Corps of Engineers report on Monkey Run creek.

It is deemed pertinent to ponder as to how the House Appropriations Committee arrived at an estimate of $5,237,000 as the Federal cost of the complete project. Apparently the committee assumed the correct cost of the primary project at $2,160,000 and added to this cost of the Monkey Run creek section as estimated last July at $3,077,000, the total being $5,237,000. As stated in a previous paragraph the current estimated Federal net cost of the Monkey Run creek section is $1,880,000.

Perhaps it also is pertinent to break down the estimated State or non-Federal costs for the Monkey Run creek section of the project.

Item	*Amount*
Contribution	$250,000
Lands, easements and rights-of-way	140,000
Reconstruction and relocation of privately-owned utilities	60,500
Reconstruction and relocation of publicly-owned utilities	168,300
Superstructures at street crossing project	92,300
Total	711,100

In the area subject to inundation by uncontrolled floodwaters of Monkey Run creek are 139 retail and small business establishments; 4 wholesale establishments, including 3 food distributors; 2 small manufacturers; 1 large manufacturer; 2 hotels; offices of 3 utilities; the New York Central Railroad; city hall and fire and police departments.

Extremely important from a flood protection angle is the location of New York State Highway 17, which is the main artery of traffic through southern New York. Should this highway be closed, a tremendous flow of traffic would require rerouting and some of this traffic just could not move at all.

The State of New York is most desirous of initiating and completing construction of the Monkey Run creek project at the earliest practicable time. As concrete evidence New York State has:

1. Appropriated funds for its share of the costs.
2. Executed an agreement assuring the Federal Government of complete cooperation as required by the project authority.
3. Received bids for construction of a section of the project. These bids were received May 21, 1953, and are in the process of being abstracted and reviewed before contract award.
4. Completed all preliminary negotiations in the acquisition of lands, easements, and rights-of-way.

The city of Corning, which is cooperating with the State of New York in carrying out the non-Federal requirements of participation, has completed all details essential and necessary for immediate beginning of construction.

Your honorable committee is urgently requested to include an item of $983,000 in the Army civil functions appropriation bill for the Monkey Run creek flood control project.

Respectfully,

HORACE S. EVANS,
Executive Director, New York State Flood Control Commission.

[Telegram]

Hon. IRVING M. IVES,
Senate Office Building, Washington, D. C.

Statement that Monkey Run flood-control project affects primarily one industry is a distortion. Corning Glass Works has six plants here manufacturing thousands of different kinds of products, many for our armed services. It is our largest but not our only industry affected.

Once I stood in corner window of our then new brick and concrete newspaper building and saw a 3-foot perpendicular wall of water that had overflown Monkey Run bed roll down pavement on street in block that contains post office, new telephone building, Masons and Elks lodges, and strike our building, filling our basement, destroying carload of newsprint and supplies, and submerging our daily newspaper press. Wholesalers and hotels and merchants in largest retail area use basements as warehouses and their stock has been ruined. Hundreds of homes in flood area. Millions of dollars of investment constantly threatened.

Another consideration is that State plans on constructing, this summer, arterial highway on Route 17, main east and west highway in southern tier from New York to Jamestown, on widest local street that Monkey Run will cross, and local authorities have plans ready for job this summer so that Monkey Run and arterial highway would be built simultaneously instead of interrupting heavy traffic 2 years.

Assurance by current fiscal year appropriation that Monkey Run and Route 17 would be built has naturally resulted in much civic and private planning which will be prevented and wasted if project is not carried out this summer.

W. A. UNDERHILL, *Publisher, Corning Leader.*

MAY 28, 1953.

AMAZON CREEK, OREG.

OFFICE OF CITY MANAGER,
Eugene, Oreg., May 25, 1953.

Hon. GUY CORDON,
United States Senator,
Washington, D. C.

DEAR SENATOR CORDON: Confirming our telephone conversation of this date relative to Amazon Creek flood-control project, we wish to again emphasize the obligation of the Congress in the continuance of this project to its completion. We wish to again call to your attention the modified Amazon project agreement wherein the city of Eugene and local water-control district were to assume certain obligations. These obligations have been assumed and paid for out of current city funds involving the purchase of right-of-way outside of the city. The city expended these municipal funds in good faith with the understanding that the Federal Government would go ahead upon a basis previously outlined and authorized. This authorization covers the present $245,000 included in the 1953–54 Federal budget for Amazon Creek improvement.

It will be a breach of good faith if the Congress does not appropriate this money for the completion of this portion of the work this year. The city of Eugene could have expended its $400,000 on Amazon flood-control work within the city limits and corrected our flood-control problem. However, this would have emptied the Amazon floodwater on to the people and property west of the city. In all good faith and with the understanding that Amazon Creek should be treated as an overall flood-control program, participated in by the Federal Government, West Amazon Water-Control District, and the city of Eugene, we have expended our funds, and it is difficult to understand how the Congress, even under their present economy moves, can overlook the obligation previously incurred to complete this project.

The money appropriated in fiscal year 1952 provided for two contracts, the first of which was completed on July 8, 1952, and the second on October 15, 1952. Inasmuch as the Amazon program was under contract during this period and these projects had not been completed, no money was appropriated for the continuance of this project in the last fiscal year. In September of 1952, a request was submitted to the Bureau of the Budget for $240,000 for the continuance of this work during 1953.

We bring these dates and construction program to your attention so that members of the Senate Appropriations Committee may be advised that this project is a continuing one and that this present amount of $245,000 has been budgeted for the continuance of the work as authorized by the Flood Control Act of 1946 and modified by the 1950 Flood Control Act.

The part which can be completed under this appropriation consists of all of the remainder of the authorized project and it would materially reduce flooding and aid in assuring protection and increase benefits of Federal and local moneys already expended on this project.

Again, we wish to thank you for your continued interest in this project. We do not cherish the position of requesting Federal funds for any purpose at this time, but we feel a definite commitment has been established upon which basis we have expended our funds upon the overall project.

We again urge that this $245,000 be included in the appropriation for 1953–54, in all fairness and good faith to the people of this community who have spent their money under the existing program.

Very sincerely yours,

OREN L. KING,
City Manager.
V. E. JOHNSON,
Mayor.
KENNETH NIELSEN,
President, West Amazon Water Control District, County Commissioner.

DALLAS FLOODWAY, TEXAS

HOUSTON, TEX., *May 26, 1953.*

The Honorable WILLIAM F. KNOWLAND,
Senate Office Building,
Washington, D. C.

DEAR SENATOR: I accordance with our telephone conversation today, I am outlining below my views on the Dallas floodway control system which was denied any furtherance for the fiscal year 1954 by the House Appropriations Committee in the civil functions bill.

I made a special trip here to Dallas to look over this project and the surrounding area that is protected by the levees along the Trinity River, although I have known the area for some 40 years. In addition to the industrial and residential development of private industry and individuals, the United States Government has some $50 million worth of property that would be inundated and badly damaged in the event of flood caused by the breaching of these levees. The Government owns one housing project, alone, which cost $35 million. It sets on an elevation which is the same as that of the base of the levee and would naturally be inundated by some 20 to 30 feet of water in event of a big flood which would not need to meet the record of known floods of the Trinity River. There are approximately 30,000 people living in areas that would be flooded by a break in the levees.

This project was originally started through private capital and a bond issue to be financed by taxes on the property within the district. The United States Congress approved the plans for the repair and improvement of the levees of this flood-control system in 1950 and $1,300,000 has been or is being spent. Two million and 900 hundred thousands dollars was recommended by the engineers for fiscal 1954 which amount was reduced to $750,000 by Budget Director Dodge and the House Appropriations Committee in turn eliminated the $750,000. This work must be done or else the lives of thousands of people are in danger and tens of millions of dollars worth of property will be damaged including some $50 million worth of property of the Federal Government in the event of a major flood.

I hope that you as chairman of the Subcommittee of the Senate Appropriations Committee will use your influence to gain the support of the other members of your committee for the $750,000 for this project.

JACK PORTER,
Member for Texas of the Republican National Committee.

TORONTO AND STRAWN DAMS, KANS.

STATEMENT BY ANDREW F. SCHOEPPEL (REPUBLICAN, KANSAS) BEFORE THE CIVIL FUNCTIONS SUBCOMMITTEE, SENATE APPROPRIATIONS COMMITTEE

On a number of occasions I have appeared before this committee in support of the Toronto and Strawn projects urging this committee to appropriate funds, so that these projects may be started.

The testimony of the witnesses that have appeared before you disclose the need for these projects. The overwhelming sentiment is in favor of these projects—there is very little opposition to them. I, therefore, join with Congressman Myron V. George in support of these two projects.

I feel that here are two projects in the southeastern part of my State that should go forward, and I am asking this committee to allow a minimum of $1½ million be appropriated for the Toronto project, and that a substantial amount be appropriated for further development of the Strawn project.

WICHITA AND VALLEY CENTER, KANS.

STATEMENT BY SENATOR ANDREW F. SCHOEPPEL

I have heretofore appeared before this committee in behalf of the Wichita Valley center flood control project. I am conversant in a general way with the plans and in my contact with the engineers I have been informed that they are ready and able to proceed with this project.

I think it is necessary and important that we should go forward with this project.

The engineers requested $2,950,000 for this fiscal year. The Budget Bureau cut this amount to $1,650,000. The House in turn recommended only $1 million. I feel that the action taken by the House is false economy, and I am therefore asking this committee to allow the request of the engineers—so that this project may proceed according to plans.

I wish to submit, for the record, a telegram which has been forwarded to me by Mr. W. C. Salome, Jr., president of the Board of Commissioners, of Wichita, Kans.

WICHITA, KANS., *May 28, 1953.*

Hon. ANDREW F. SCHOEPPEL,
Senate Office Building,
Washington, D. C.:

Referring to your request for information concerning the Wichita Valley center flood-control project appropriation it is my belief that the following facts are pertinent. The Corps of Army Engineers requested the sum of $2,950,000 as being absolutely necessary for the expeditious continuance of the project for the fiscal year 1954. This figure was based on the minimum amount necessary to continue the project under going contracts including rail relocations which are necessary before additional construction can be economically done. President Eisenhower's recommendation on the above request of $1,650,000. The House of Representatives Civil Functions Committee recommended a cut to $1 million. At a recent conference with General Sturgis, chief of Corps of Army Engineers, Tulsa, he stated the corps was ready and able to fully use the original request of $2,950,000 and that plans had been drafted requiring that amount. The Corps of Engineers have to date expended $2,087,900 and have obligated an additional $2,045,900. An additional $5,660,000 is required for rail relocation. The completion of channel construction and diversion will require an additional $3,789,000. With these figures in mind the original request for $2,950,000 for the fiscal year 1954 certainly seems essential and justified bearing in mind that the money already expended will serve no useful purpose and no flood protection afforded until the entire project is completed. To limit the appropriation to $1 million for the fiscal year would in effect bring the project to a halt and result in completion being indefinitely postponed. It should be noted that the city of Wichita and Sedgwick County have gone forward in good faith in acquiring all necessary right-of-way, providing for relocation of bridges and utilities. To date the sum of $3,218,035 in cash has been expended for right-of-way. Within the next few days an additional appraisers' report will be filed obligating the city to pay an approximate additional sum of $400,000 for right-of-way which will complete the acquisition of all necessary right-of-way except one segment.

This remaining segment should be acquired within 90 days and at an estimated cost of $400,000. In other words the city and county will have fulfilled all of its obligations under the project within the next few months. By this token they are approximately 3 years ahead of construction by the Federal Government. In addition to the amounts mentioned above the State of Kansas has already expended $125,000 and Sedgwick County is committed to expend prior to November 1, 1954, $350,000 for bridges. The moneys already expended and

that will be expended within a few months by city and county will approximate one-third of total cost of project. It is unusual for the local government in projects of this character to participate to this extent. This amply demonstrates the good faith of the people of this community and the Federal Government in turn should show its good faith by proceeding expeditiously with construction. It should be noted that all litigation has been resolved in favor of the city and county and none is pending and that all questions involved have been resolved by the United States Supreme Court and the supreme court of the State of Kansas. The citizens of the city and county have accepted the project as being vitally necessary and are impatient for its completion. This is especially true in light of the flood occurring in the El Dorado region some 30 miles distant from Wichita on May 27, 1953, resulting in over a million dollars in property loss and one known death. A flood of this character in the Wichita vicinity would have resulted in many millions of dollars loss. It is urgently hoped that after these facts have been made clear to the Congress, that in all fairness to the city of Wichita and Sedgwick County, it will see fit to restore and appropriate for the fiscal year 1954 the original $2,950,000 request of the Corps of Engineers.

Respectfully submitted.

WILLIAM C. SALOME, Jr.,
President of the Board of Commissioners, Wichita, Kans.

TUTTLE CREEK

KANSAS CITY, KANS., *May 10, 1953.*

Hon. ANDREW F. SCHOEPPEL,
United States Senator, Senate Office Building, Washington, D. C.:

In partial restoration of churches and schools destroyed or damaged in 1951 Kaw Valley flood, we have to date expended $400,000. Our loss was nearly 1 million over and above the personal loss of our church members. I grew up in Dayton, Ohio, Miami Valley Conservancy District, and believe dry dams plus widespread soil-conservation practices are the answer to the recurrence of such floods. Drop the politics, drop the idea of power or recreation reservoirs demanding constant storage of water, but let us have the essential money for dry dams and for soil conservation. The most competent engineers say that Tuttle Creek Dam is necessary in this program after years of study. Can we continue hopefully with our restoration work.

EDWARD J. HUNKELER,
Archbishop of Kansas City in Kansas.

Senator ELLENDER. Mr. Chairman, I should like to have inserted at a suitable point in the hearings the following telegram which I have received from Hon. Jesse L. Webb, Jr., mayor-president of the city of Baton Rouge. I believe this will serve to indicate to the committee in one additional way the great desirability of making adequate survey funds available to worthy projects, especially where initial work has been undertaken and remains incomplete.

BATON ROUGE, LA., *May 13, 1953.*

SENATOR ALLEN J. ELLENDER,
Senate Office Building, Washington, D. C.:

The disastrous flood in southeast Louisiana which began on May 2 and is still continuing makes it imperative that funds provided for the Corps of Engineers to complete the plans and surveys needed to permit prompt commencement of major flood-control work in the lower Amite River Bayou Manchac flood area. Estimates indicate $60,000 required. City Council of the City and Baton Rouge and the Parish Council of the Parish of East Baton Rouge join with police juries of Livingston, Ascension, and Iberville Parishes in urging that this appropriation be made without delay.

JESSE L. WEBB, Jr.,
Mayor-President, City of Baton Rouge, Parish of East Baton Rouge.

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
May 29, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee,
United State Senate, Washington, D. C.

DEAR STYLES: On Monday, May 25, Senator John Cooper and I appeared before the Subcommittee on Army Civil Functions of the Senate Appropriations Committee in support of funds for the Barbourville, Ky., flood-control project.

Supplementary to our remarks on Monday before the committee, I should like to invite the attention of the members of the committee to the following pertinent facts bearing directly upon the Barbourville project prior to the committee's making any final determination and recomendation to the Senate relative to appropriations for this project.

Barbourville has floated bonds, sold them, and is currently paying interest on them in order that the city may be ready to meet its local participation share of the authorized flood-control project.

The Barbourville, Ky., flood-control project is on the Cumberland River, in southeast Kentucky and 18 miles north of Pineville. This project has been authorized by Congress and the plans for the construction of the flood wall are about 50 percent completed. In 1950, $25,000 was appropriated to start planning on this project. In fiscal 1953 the Congress appropriated $25,000 for continued planning on the Barbourville project.

For fiscal 1954, $75,000 was recommended by the Bureau of the Budget and included in the Truman budget, and retained by recommendation of the Bureau of the Budget to be included in the revised budget estimates. The Barbourville project has been declared an essential project by the Corps of Engineers with the Bureau of the Budget concurring therein and recommending that $75,000 be allocated by the Congress to complete the plans on this project.

After the authorization of this project and when the proportionate share the citizens of Barbourville were to bear was made known, they were called upon to raise their share of the money. An election was held and Barbourville voted bonds by an overwhelming majority to include over one-half million dollars for Barbourville's part of the flood-wall project, and voted $800,000 in order to change the sewer system of the city so as to fit in the plans of the Army engineers on the flood-control project.

The sale of these bonds was approved by the court of last resort in Kentucky and they have been sold and the sewer work is more than 50 percent completed in accordance with the suggestions and recommendations of the flood-control plan. Currently, the city of Barbourville is having to pay interest on their bonds and it is costing the city from $15,000 to $20,000 a year to meet this interest.

Almost every year floods flow through the streets of Barbourville, reaching a depth of 5 to 6 feet in most of the business houses and homes, and inflicting recurring damages that will in a few years exceed the cost of this entire project. The cost of this project is estimated to be $2 million with heavy contributions on the part of the local citizens of Barbourville which they are already prepared to meet.

It would seem that with plans as advanced as they are, and the local participation requirement already met by Barbourville, there is to a very large degree a moral as well as a contractual obligation on the part of the Federal Government to carry out the recommendations of the Bureau of the Budget and the Army engineers to allow the plans for Barbourville to be completed during the ensuing fiscal year.

This community is essential to the war effort in that it is located in the bituminous coal section where large amounts of coal and considerable hardwood timber are produced, and it also furnishes some coal that is trucked to the Kentucky Utilities electric generating plant near Pineville, Ky., to make electric energy for the atomic-bomb plant at Oak Ridge, Tenn.

To delay this plan for another year will cost the citizens of Barbourville a considerable sum of money which the town and its people can ill afford. In addition to the money involved, any projected delay of this project will certainly subject these good people to the ravages of recurring floods.

On the basis of the facts presented herein, I request the committee's earnest and favorable consideration of the restoration of the sum of $75,000 for the Barbourville, Ky., flood-control project.

Sincerely yours,

EARLE C. CLEMENTS.

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
May 29, 1953.

Hon. STYLES BRIDGES,
Chairman, Senate Appropriations Committee,
United States Senate, Washington, D. C.

DEAR STYLES: Senator John Cooper and I appeared before the Subcommittee on Army Civil Functions of the Senate Appropriations Committee in support of funds to continue the work on the Pineville flood-control project this past Monday, May 25.

Supplementary to our remarks on Monday, there are certain pertinent facts bearing upon the essentiality of this project which I wish to present to the members of the committee at this time for their study and deliberation prior to a final determination being made by the members of the committee relative to funds for Pineville.

The Pineville, Ky., flood-control project was authorized in 1936. Moneys for this project were included in the appropriations bill in the amount of $500,000 by the United States Senate in 1950. This $500,000 was allocated for construction purposes. However, when the Korean conflict broke that year the Pineville project, along with other projects, was deleted from the appropriation bill.

However, due to the major contribution Pineville made to the war effort through the production and shipping of bituminous coal, and manufacturing electric power for use in the war factories, Pineville, Ky., was certified as essential to the war effort.

During the 82d Congress, 2d session, there was appropriated $274,000 to begin construction on this project. The Federal Government called upon the citizens of Pineville to raise their proportionate share of the cost of this project. The cost to the Federal Government is estimated to be $1,500,000. The cost to the citizens of Pineville is estimated to be $590,000, thus making Pineville's share of this project more than one-third of the Federal Government's share.

Pineville held an election, bonds were issued, the court of appeals held the election was valid, and bonds were sold and the money raised to pay the local participation portion of this project.

Some preliminary work has been done on the project, and last fall the Federal Government called on the officials at Pineville to buy the rights-of-way for the first segment of the flood wall. Immediately the citizens withdrew from the insurance company to whom they had sold the bonds $200,000 of their money and they have actually spent $50,000 of this money on the first 17 rights-of-way requested by the Federal Government. Pineville is paying interest on this money and it is costing nearly $20,000 a year for the city to pay the interest on this bond issue.

Besides raising this large local contribution sum for the Pineville project, the State of Kentucky, through the highway department, in order to tie in with this flood wall and give the streets and highways protection from flood stage, has just completed a high bridge over Cumberland River there at Pineville and is more than one-half through constructing an elevated highway from the bridge into the city and tying onto the flood wall so as to protect the streets and highways from flood stage.

This was accomplished at an expense of more than a million dollars and the Congress of the United States was not called upon to make any contribution but it was done by the State of Kentucky through our highway department. I know of no community which has done more to meet its obligations than has Pineville.

The sum of $590,000 for Pineville was recommended in the Truman budget; and that figure was retained by the Bureau of the Budget in the revised budget estimates for fiscal 1954.

The House of Representatives deleted the sum of $590,000 recommended for this project. This action has left the community of Pineville in a rather precarious situation, namely, (1) if a flood strikes within the next 12 months, the cost in damages to Pineville could well exceed the cost of this flood-control project. This flood wall protects the railroad yards and trucks hauling coal to the Kentucky Utilities plant. The Kentucky Utilities plant that generates electricity just below Pineville has built a direct line from its plant to the atomic plant at Oak Ridge, Tenn., and every day in the year the coal that is hauled to this generating plant to make electric energy for the atomic bomb plant at Oak Ridge, Tenn., comes through the streets and highway at Pineville, Ky., (2) unless

funds are appropriated sufficient to continue the work on the Pineville project for fiscal 1954, the entire project will be stymied.

Certainly, to delay work on this project for the ensuing year will cost the citizens of Pineville considerable money and will again subject them to the dread ravages of floods.

On the basis of the facts presented herein, I request the committee's earnest and favorable consideration of the restoration of the sum of $590,000 for the Pineville, Ky., flood-control project.

Sincerely yours,

EARLE C. CLEMENTS.

STATEMENT BY SENATOR JOHN COOPER

GENTLEMEN: Pursuant to the permission granted during the open hearings, I should like to make a short further statement with respect to the Pineville flood-control project, the Barbourville flood-control project, and the Covington flood-control project. The Pineville and Barbourville flood-control projects have been so fully presented by my colleague, Congressman Golden, that I need add little more. There seems to be the fullest justification for each of these projects on a purely economic basis. Both Pineville and Barbourville have suffered grievously from floods in the past and should be protected from further damage. The amounts which are respectively requested for the commencement of the construction in the case of Pineville and for the planning survey in the case of Barbourville will enable progress to be made toward flood protection for these cities.

The citizens of Pineville in particular, since their work is nearer to commencement, have had an opportunity to display their entire willingness to cooperate financially with the activity of the Federal Government. This is not a case where the citizens are begging. The Corps of Engineers indicated in their report what portion of the project should be borne locally, and the citizens of Pineville have cheerfully met their portion of the obligation.

I urge the committee to approve the funds for the Pineville and Barbourville flood-control projects.

The Covington flood wall is moving on toward completion. There seems to be some question about whether the effective protection from flood will be delayed by another flood season if the $1 million cut voted by the House is retained in effect. However, there seems to be no doubt that this figure is a minimum, and that if Covington is to be protected from flood damage within a reasonably early date, and the advantage thus realized from the large investment already made in the Covington flood wall, enough funds must be retained in the appropriation so that the work in Covington can proceed. I recommend that the committee retain in the appropriations bill at least the amount of $1,475,000 which was included in the budget submitted by the new administration.

STATEMENT OF EVERETT T. WINTER, EXECUTIVE VICE PRESIDENT, MISSISSIPPI VALLEY ASSOCIATION, IN RE WARRIOR-TOMBIGBEE WATERWAY

The vast majority of the membership of the Mississippi Valley Association live in the 23 States that drain onto the Mississippi River. At the 34th annual meeting of the Mississippi Valley Association held in St. Louis in February 1953, 1,000 delegates voted unanimously for the Warrior-Tombigbee River project as follows:

"The urgent need has been demonstrated and the economic justification has been shown for improving facilities of the Warrior-Tombigbee Waterway in Alabama to provide more efficient navigation, adequate flood control, and sufficient water supplies which are needed for the industries in the river valley to achieve maximum production and distribution, which production and distribution is essential to continued national growth and progress, the national defense, and the overall national economy.

"There is a complete program for rebuilding and modernizing the obsolete and wornout locks and dams on the river system and for building headwaters, dams, and reservoirs which will give a regulated flow of water in the river to aid navigation, to insure adequate water supplies, to minimize flood damages, to help control pollution, to provide for the growth of preservation of fishlife, and to provide water-recreation areas.

"We recognize the need for the improvements sought and endorse this program. We urge the President of the United States, the Congress, and the Corps of Engineers to take the necessary action to authorize these projects and appropriate the funds needed without delay to complete these projects at the earliest possible date."

The reasons why the Mississippi Valley so wholeheartedly endorsed this project include a statement taken from the transcript of the debate before the resolutions committtee, which reads as follows:

"We have only to examine the debt load we are accumulating to see that future generations of Americans will be bankrupted by today's generation of Americans if we do not plan carefully with our vision directed just as far into the future as we are capable of directing it. We have never paused for one moment in the development of technical know-how in the United States. No one would dare pause today in the pursuit of every possible development in the field of atomic energy. Why, then, should we hesitate in the pursuit of development of our natural resources on which all of our technical accomplishments are dependent? We are a prosperous Nation but let us forbid with all the vehemence we can summon that we will ever grow so fat with prosperity that we decide to sit in glory on our accomplishments. For should that day come, and there are those who by their words and deeds would have us believe they want it now, that day will mark the beginning of the end of this Nation. We cannot stand still and live. We must grow and progress."

The first project for improvement of the Warrior-Tombigbee Waterway was authorized by Congress in 1871. This first project covered the Tombigbee section of the waterway below Demopolis. Various subsequent acts of Congress extended the development project up the river and between 1902 and 1915, 17 locks and dams were built. These locks and dams made it possible to open the waterway to navigation for 467 miles. Three of the original locks and dams, Nos. 10, 11, and 12 were replaced with the completion of the Tuscaloosa lock and dam in 1945. There are 15 locks and dams on the river now. They provide a lift of 250 feet from Mobile to Birmingham Port and beyond to the head of navigation on the Locust and Mulberry Forks on the Warrior River. Fourteen of the present locks and dams are 37 to 50 years old. They are old, obsolete, worn out and in danger of falling apart. Their size and method of operation is an indication of their obsolescence. They average 52 feet in width by 282 feet in length. This means that a standard tow of 8 or 11 500-ton barges of the type operating on the river must be split into 3 segments to lock through each lock.

A modern 110- by 600-foot lock with a 40-foot lift is under construction at Demopolis. We sincerely hope this will be completed in 1953. When completed, the Demopolis lock and dam will flood out 4 of the old low-lift locks and dams and provide a deep-water channel for 50 miles in a section of the waterway now characterized by sharp bends and sandbars which slow navigation.

The old dams are all low dams and they create shallow pools. At average river stage the bottoms of loaded barges are frequently only 1 foot above the river bed.

Of immediate concern is the replacement of locks and dams Nos 8 and 9. These are the structures just above the old obsolete structures that will be replaced by the completion of Demopolis. They are of timber crib construction and were built originally for paddle wheel steamers with a maximum draft of 6 feet, 50 years ago. Maintenance on these old structures over a period of just a few years is far greater than the cost of replacement with modern efficient structures.

Better than 2½ million tons of freight is now being carried on this river each year but it is reasonable to assume that the tonnage carried would be greatly increased to the benefit of all the country with the modernization program recommended by the Corps of Army Engineers. The area served directly by the Warrior-Tombigbee Waterway consists of 14 of Alabama's 67 counties. These 14 counties comprise 27 percent of the State's land area and they contain 40 percent of the State's total population; 35 percent of Alabama's total industry and 42 percent of Alabama's employees in industry.

The project does more than just make a satisfactory navigable channel as it has a tremendous value in the supply of water for industry and for domestic purposes.

The Mississippi Valley Association endorsed the Warrior-Tombigbee project because we believe it is one of the most economically sound projects proposed in the United States. We believe that the entire program should eventually be completed. Only our own failure as American citizens to recognize and develop the potential possibilities of our waterways and the regions they serve can limit this country's growth, prosperity, and progress.

We sincerely request this committee to give careful consideration to the making of the initial appropriation to start this much-needed project in Alabama. We endorse the recommendation of Mr. Braxton B. Carr, executive vice president of the Warrior-Tombigbee Development Association before this committee May 25. We wholeheartedly recommend that the $1,900,000 be reinstated in the current appropriation bill for the start of construction of the Warrior Lock and Dam as a replacement for Locks and Dams 8 and 9 on the Warrior-Tombigbee.

We sincerely believe that all the people in all of the 48 States will benefit directly or indirectly by this project.

SACRAMENTO RIVER MAJOR AND MINOR TRIBUTARIES—STATEMENT OF HON. CLAIR ENGLE, 2D DISTRICT, CALIFORNIA, BEFORE THE SENATE APPROPRIATIONS SUBCOMMITTEE

Mr. ENGLE. Mr. Chairman, I wish to direct the attention of the committee to two comparatively minor projects that need immediate attention. One is known as the Little Chico-Butte Creek, and the other is riprapping work on the Sacramento River.

Taking up the Little Chico-Butte Creek: It is part of the Sacramento River major and minor tributaries. These flood control works were approved in the Flood Control Act of 1944, House Document No. 649, 78th Congress, 2d session, and amended by the Flood Control Act of 1950, House Document No. 637, 81st Congress, 1st session. The Federal Government and the State have already spent a little over $1 million on this project. Work was started at the lower end and as I understand, some $1,062,000 has already been spent. It will cost $700,000 to complete the project.

I would like at this point to refer to the testimony I gave before the House Appropriations Subcommittee which will give you some background information:

"The works they have completed at present do not reflect an economic project. They started at the lower end there because the people of the lower end wanted an assurance that they would have the clearing and the levees necessary to take care of the additional water which would be put down on them from Little Chico Creek when the project was completed. We got into the Korean War, and under the order put out by the previous administration, all works were stopped. So we sit here at the present time with a project on which over $1 million has been spent and which, unless completed, is uneconomic. The portions of that project which make it an economic project with a better than 1-to-1 benefit-to-cost ratio are those portions at the top of the project which give protection to the highly cultivated and highly developed almond orchards and to the city of Chico. So, in the absence of completing this project the Federal Government has, for all intents and purposes and with only minor benefits involved, poured $1,062,000 down the drain.

"The Army engineers out in California this time requested some funds, I believe, in their budget. That money, if my information is correct, was stricken out back here in the national office by the engineers themselves or by the Bureau of the Budget. That is the reason I sent over a memorandum some time ago so that a specific question could be asked of the engineer witness in order to develop what was sent in from the regional office.

"The regional office believes this matter is important, and recommended that the additional money or a portion of it, be appropriated to complete the project; and they support the economics of the original project. In the absence of completion of it the money is simply wasted and those people sit there under the threat of devastating floods."

I would like to reiterate that if the project is not completed the Federal Government has in effect virtually wasted the $1,062,000. By appropriating the additional $700,000 required it will make it a complete and economic project to the benefit of not only the local people but all the taxpayers as well.

I realize the problem the Appropriations Committee is facing in trying to cut expenses but in this case I am simply urging that in the priority of projects some very special consideration should be given to those cases where the Federal Government has invested its money and where in the absence of completing the project we stand to lose the Federal investment and certainly not to achieve the economic kind of a project which was contemplated when it was initiated and when the Federal Government spent its money.

RIPRAPPING WORK, SACRAMENTO RIVER

This project involves riprapping work to prevent the Sacramento River from breaking out of its banks and getting into a tributary. I furnished the House Appropriations Subcommittee with maps and memoranda from the Army engineers involving this project. The first riprapping work was done to prevent the Sacramento River from cutting into Antelope Creek in Tehama County, which parallels the Sacramento River at the point of danger. If you will note the testimony offered by the Army engineers, their first work did not go far enough. Since the initial project was started the river is working around the edge of the riprapping and threatens to cut over into Antelope Creek. If this takes place, serious and costly damage will result—far exceeding the amount necessary to complete the riprapping work.

The project has basic authorization under a bill introduced by the late Congressman Harry Englebright. The initial project involved $150,000. The Army engineers now say that all the money has been spent. It should be mentioned at this point that there is some question as to whether the basic authorization still is in effect for spending more money.

It is estimated that $50,000 is required to do the necessary riprapping work which not only will preserve the existing works but will prevent further damage by erosion to rich agricultural lands. If authority does not now exist—and it appears it may not—it will be necessary for the committee to write in a special clause in the bill you are considering to appropriate the necessary $50,000. Irrespective of the absence of authority, I believe that in this instance the item can be justified as an item to protect existing flood-control works and existing improvements, because if the addition is not put on, the previous riprapping will be lost.

In summary, I am asking the committee to save Federal investments already made, previously authorized and initiated by the Army engineers. If the item is not included, it may well mean the entire loss of Federal moneys already expended and in addition will result in heavy losses to those in the areas involved.

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C., May 27, 1953.

Hon. WILLIAM F. KNOWLAND,
United States Senate,
Washington 25, D. C.

MY DEAR SENATOR KNOWLAND: By letter of May 1 you requested the views of the Department of the Interior regarding a budget request of the Corps of Engineers, Department of the Army, for funds for continuation of planning for Painted Rock Dam on the Gila River. At the same time you referred to a letter of May 7, 1951, from former Assistant Secretary William E. Warne to Senator Carl Hayden, which presented the background for the construction of flood-control developments on the lower Gila and Colorado Rivers.

The situation has not materially changed in the 2 years which have elapsed since Mr. Warne's letter except that the protective levees for the Yuma project lands and the Mexican Diversion Dam at the Morelos site are now essentially complete. The agreement sponsored by the International Boundary and Water Commission, by which Mexico accepted the responsibility for financing a portion of the cost of protective works, was based upon a design flood from the Colorado and Gila Rivers of 310,000 cubic feet per second. Provision was made in that agreement for reduction in the height of the levees in the event that other flood-control works constructed by and in the United States should be built. Painted Rock Dam on the Gila River was authorized for construction by the Flood Control Act of May 17, 1950, with the expectation that that dam would be built and operated to control Gila River floods to a maximum discharge of 36,500 cubic feet per second. With this expectation, the levees were redesigned to provide protection against the design flood from the Gila River and a discharge of 103,500 cubic feet per second on the Colorado River, making a total design flood of 140,000 cubic feet per second in the Yuma Valley below the mouth of the Gila River. Mexico's share of the cost of constructing the flood protective works was computed at $2,126,000, which is subject to recomputation upon actual completion of the levee construction. A credit of $2 million has been established by Mexico and is being drawn upon for construction of the levee system.

In the event a flood with a flow in excess of 140,000 cubic feet per second should occur at the present stage of construction of the flood protective works, the levees on either side of the river might be overtopped and a tremendous loss of property, crops, and even human life, would result. Lacking the protection which would be afforded by Paint Rock Dam, flood crests as high as 310,000 cubic feet per second might occur. The obligation is clearly up to the United States. Mexico has complied wholly with the agreement as to its obligation. The only practical means at this time for the United States to discharge its treaty obligations is to proceed with construction of Painted Rock Dam at the earliest possible time and thereby remove the threat of disaster which threatens the lives and property of thousands of people in Arizona, California, and Mexico.

In view of the foregoing, I urge most strongly that the funds required to expedite planning for the construction of Painted Rock Dam be made available to the Corps of Engineers.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary of the Interior.

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C.

Maj. Gen. SAMUEL D. STURGIS, Jr.,
Chief of Engineers, Department of the Army,
Building T-7, Washington 25, D. C.

MY DEAR GENERAL STURGIS: This latter is in response to an inquiry by General Chorpening of your office relative to the Bureau of Reclamation's desires with respect to the pool level and capacity of the Garrison Reservoir in North Dakota.

The Bureau of Reclamation feels that the Garrison Reservoir should be operated at a maximum normal pool elevation of 1,850 feet above sea level, as proposed by the Corps of Engineers.

Investigations of the lands proposed for irrigation by the Missouri-Souris Diversion in North Dakota indicate that the soils in the northwestern part of the State are not suitable for sustained irrigation because of inadequate drainage, while in the central and eastern parts there are large areas of land with fine drainage possibilities that are suitable for sustained irrigated agriculture. Because of the change in location of the lands to be served, a Missouri-Souris irrigation plan that will take water from the Garrison Reservoir, instead of from the Missouri River below the Fort Peck Dam as previously contemplated, has now been approved for investigation. Construction costs under the Garrison diversion plan are estimated roughly to be $134 million less than under the previous plan, and annual operation costs would be about $700,000 less. To accommodate this plan, the operation of Garrison Reservoir at a normal elevation of 1,850 will be most advantageous.

Accordingly, pursuant to the provisions of paragraph 9 of Senate Document No. 247, 78th Congress, 2d session, the Bureau of Reclamation agrees with the Corps of Engineers in a normal maximum pool operating level of 1,850 feet above sea level and a storage capacity of 23 million acre-feet.

This agreement is made with the understanding that the Corps of Engineers will fully protect the Bureau's Buford-Trenton Irrigation project, the State of North Dakota's Lewis and Clark Irrigation project, and the city of Williston from any adverse effects due to the reservoir.

In addition to the direct benefits to irrigation through minimizing pumping costs for the diversion plan, the increased power that can be generated at the higher pool level without any increased cost in the construction of the dam and powerhouse, which are now well along toward completion, will give additional revenue that will make it possible to complete payment of the reimbursable costs of the entire project at a much earlier date.

Sincerely yours,

_____,
Secretary of the Interior.

(Whereupon, at 3:05 o'clock p. m., Tuesday, May 26, 1953, the hearing was concluded.)

ADDITIONAL CORRESPONDENCE

COMMITTEE CLERK. Additional correspondence has been received since the hearing was closed and is inserted in the record at this point.

(The correspondence referred to follows:)

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
June 1, 1953.

HON. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
Committee on Appropriations, United States Senate,
Washington, D. C.

DEAR MR. CHAIRMAN: I am sending you a letter dated June 1 from the Secretary of the Navy in which he says that he considers the Craney Island project to be of sufficient importance to justify its being added to the House bill when we report that bill to the full Senate committee. The testimony already taken by our subcommittee clearly indicates that the Government can save a lot of money by purchasing the Craney Island disposal area instead of continuing to annually dump a million and a half cubic yards of material outside of Cape Henry. Therefore it has been a little difficult for me to understand why the Director of the Budget has not agreed to give us a budget estimate on this project unless, of course, he feels that this would be a technical violation of his principle of no new starts and that he would rather lose some money on the project than to violate that principle.

I shall appreciate your kindness in having the letter of Secretary Anderson included in our printed hearings.

With kind personal regards, I am

Sincerely yours,

A. WILLIS ROBERTSON.

DEPARTMENT OF THE NAVY,
OFFICE OF THE SECRETARY,
Washington, June 1, 1953.

HON. A. WILLIS ROBERTSON,
United States Senate, Washington 25, D. C.

MY DEAR SENATOR ROBERTSON: At the suggestion of Congressman Porter Hardy, I am writing to you to explain the Navy's interest in the Norfolk Harbor dredging spoil disposal project. This project was omitted from the Army civil functions appropriation bill as passed by the House, notwithstanding the district engineer in February found it necessary to order that no additional permits be issued for dumping dredged material within the harbor.

If the 1,500,000 million cubic yards of material dredged annually from naval installations in the Norfolk area has to be dumped outside Cape Henry, the increased cost will be $865,000 for each year the project is deferred. Congressman Hardy in his remarks on the floor of the House explained the similar added costs to other public and private interests. It seems that the economic soundness of the proposal is recognized by all concerned. Important as the above savings are to the Navy's effort to get the most out of every dollar appropriated to the Department, I would not feel justified in writing to you if that were the only consideration.

But it is neither the only nor, in fact, the most important consideration. This project is essential to national defense. It is essential now, not 2 or 3 years from now. If compelled to dump outside the limits of the feasible harbor defense installations (nets, mine fields, etc.) in time of war, vital equipment will be exposed to enemy action. Providing escorts to protect it or industrial capacity to replace it would be at the expense of the total war effort. Furthermore, it is not sufficient for the Norfolk Harbor channels to be kept open to normal traffic; they must be capable of admitting the heaviest combatant ships; even if they should be at deeper than normal draft because of battle damage, to the large drydecks at the Portsmouth Naval Shipyard and Newport News Shipbuilding Co.

I consider this matter of sufficient importance to justify its being added to the House bill when that measure is under consideration by the Senate Appropriations Committee.

A copy of this letter is being furnished to Congressman Hardy.

Sincerely yours,

R. B. ANDERSON.

DEPARTMENT OF STATE,
Washington, May 27, 1953.

Hon. WILLIAM F. KNOWLAND,
Chairman, Subcommittee on Army Civil Functions,
United States Senate.

MY DEAR SENATOR KNOWLAND: Referring again to your inquiry of May 1, 1953, I enclose a statement by Commissioner L. M. Lawson of the International Boundary and Water Commission, United States and Mexico, regarding the importance of early completion of the Painted Rock Dam and Reservoir project.

For the reasons elaborated by Commissioner Lawson, the Department remains very much interested in the continuation of planning for Painted Rock Dam. Without the control of the Gila River which this dam would provide, floods as disastrous as those of the past can and probably will occur again in the lower Colorado River. Such a flood would jeopardize United States lands in Arizona and California which the Department has long sought to protect through agreement and joint construction works with Mexico. The flood might well break levees constructed for the protection of the Yuma Valley of Arizona and designed on the assumption that the Painted Rock Dam would be built. Unless this dam is constructed, it may not be feasible to plan on the lower Colorado the flood control which would insure against a repetition of the diversion of 1905 when the entire Colorado River emptied into the Imperial Valley of California.

The Southwest, as you know, has been suffering from a prolonged drought. In past experience such droughts usually have ended with record floods. Since the lower Colorado River follows in its present course the crest of an alluvial cone higher than any known to have been developed heretofore by the river, it must be anticipated that unless corrective measures are taken another major flood might again change the course of the river.

It is hoped, if planning can be based upon the assumption that the Painted Rock Dam will be built within the near future, that Mexico and the United States can soon agree upon a flood-control program for the lower Colorado River. In order that the program may be feasible as conceived and sound when constructed, planning on the Painted Rock Dam should go rapidly forward and the dam should be constructed as soon as possible.

In view of the urgency of the matter this report has not been cleared with the Bureau of the Budget.

Sincerely yours,

THRUSTON B. MORTON,
Assistant Secretary
(For the Acting Secretary of State).

INTERNATIONAL BOUNDARY AND WATER COMMISSION,
UNITED STATES AND MEXICO,
El Paso, Tex., May 7, 1953.

STATEMENT BY COMMISSIONER L. M. LAWSON, INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO, REGARDING IMPORTANCE OF EARLY COMPLETION OF THE PAINTED ROCK DAM AND RESERVOIR PROJECT

Extending over a period of some 50 years, first with the United States Geological Survey, later with the Bureau of Reclamation, and for the past 25 years as United States Commissioner on this Commission, my work has been closely related to problems of the Colorado River. I have personal knowledge of two of the most disastrous floods in the lower Colorado: that of 1905, when the river broke out of its channel to flow through the Imperial Valley to the Salton Sea, and that of 1916 when the levees in the vicinity of Yuma were breached. Both of these floods originated very largely from the watershed of the Gila River above the Painted Rock site, and caused great damage.

Having this personal knowledge of actual floods originating from the Gila, I have advocated for some 30 years the construction of adequate flood-control works on that stream as essential to any plan for flood protection on the lower Colorado. While it is, of course, true that since the flood of 1916 Hoover and other dams have been placed in operation for flood-control purposes on the main stem of the Colorado, no flood-control dams have been constructed on the Gila

or its tributaries. Moreover, due to the absence of scouring floods since the construction of Hoover Dam, the channel of the lower Colorado has deteriorated seriously, to the extent that I consider that, without adequate control of the Gila, floods even more disastrous than in the past can and will occur in the lower Colorado. Studies by this Commission in collaboration with the Corps of Engineers, Bureau of Reclamation, and the Geological Survey show that without such control of the Gila, floods of 310,000 cubic feet per second can be expected to occur in the Colorado at Yuma. The 1916 flood, very largely from the Gila, had a peak discharge of about 240,000 cubic feet per second at Yuma. With construction of the Painted Rock Dam the maximum probable discharge can be limited to 140,000 cubic feet per second at Yuma.

While, as stated, I have long been interested in the problem of flood control of the lower Colorado, my immediate interest is due to the responsibilities of this Commission under the Mexican Water Treaty:

Pursuant to that treaty, Mexico has constructed and placed in operation the Morelos diversion dam in the limitrophe section of the Colorado River, assuming responsibility for the cost of construction, operation, and maintenance of such works as in the opinion of the Commission might be required to prevent flood and seepage damages to United States lands resulting from the structure. Studies carried on by the Commission showed the necessity of prompt raising and strengthening of the levees immediately upstream from the structure and an agreement was reached with Mexico, by Commission minute dated May 6, 1950, providing for payment by Mexico of its share of the work on the basis of construction of levees for a 310,000-second-foot design flood, without additional flood control on the Gila. The agreement also provided for payment by the United States of the cost of that part of the work which would have been necessary even if the Morelos diversion dam had not been placed in operation. Shortly after conclusion of the agreement with Mexico, the Congress, by act of May 17, 1950, authorized the Painted Rock project by the Corps of Engineers. Since, as stated, this dam will reduce the maximum probable flood discharge at Yuma to 140,000 cubic feet per second, and will thereby provide a greater degree of protection than levees alone, plans for construction of the levees upstream from the Morelos Dam on the Colorado were adopted for a design flood of that magnitude. The levess are now substantially completed on that basis, both the Mexican and United States increments of the work being performed by the Bureau of Reclamation and with Mexico paying most of the cost on the basis of its share of the estimated costs of constructing levees for a 310,000-second-foot flood, as provided by the agreement of May 6, 1950.

The Commission's further interest in the Painted Rock Dam lies in its bearing upon flood control of the Colorado River below Imperial Dam, which, with respect to the United States, is of direct concern to the Imperial Valley of California and the Yuma Valley of Arizona. The Commission is charged by article 13 of the water treaty with investigations and preparation of plans for flood control on this reach of the river extending to the Gulf of California, and the submission of a report to the two governments regarding the works that should be built. Our studies and investigations are nearing completion and it is expected that the two sections of the Commission will soon be able to begin discussions for the development of the plans that are to be submitted to the two governments, and which probably will include rectification of the river in Mexico and levee construction and strengthening. However, unless Painted Rock Dam is built on the Gila, I am doubtful that it will be feasible to provide adequate protection solely by works on the lower Colorado of the nature which the water treaty contemplates for construction by the two governments. It is therefore highly desirable from the standpoint of providing adequate flood control on the lower Colorado that the United States proceed as soon as possible with the construction of the Painted Rock Dam.

The entire Southwest has been suffering from a prolonged drought and for several years there have been no appreciable inflows from the Gila into the Colorado. While I cannot, of course, forecast the end, past experience has showed that such droughts usually end with very heavy rains producing record floods. If this experience should be repeated before the Painted Rock Dam is completed, there is great danger of a repetition of the past disastrous floods from the Gila River, in which event the ensuing damages would be appreciably greater than those suffered in the past because of the greatly increased property values that would be affected.

L. M. LAWSON, *Commissioner.*

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington 25, D. C., May 27, 1953.

Hon. WILLIAM F. KNOWLAND,
United States Senate, Washington 25, D. C.

MY DEAR SENATOR KNOWLAND: By letter of May 1 you requested the views of the Department of the Interior regarding a budget request of the Corps of Engineers, Department of the Army, for funds for continuation of planning for Painted Rock Dam on the Gila River. At the same time you referred to a letter of May 7, 1951, from former Assistant Secretary William E. Warne to Senator Carl Hayden, which presented the background for the construction of flood-control developments on the lower Gila and Colorado Rivers.

The situation has not materially changed in the 2 years which have elapsed since Mr. Warne's letter except that the protective levees for the Yuma project lands and the Mexican diversion dam at the Morelos site are now essentially complete. The agreement sponsored by the International Boundary and Water Commission, by which Mexico accepted the responsibility for financing a portion of the cost of protective works, was based upon a design flood from the Colorado and Gila Rivers of 310,000 cubic feet per second. Provision was made in that agreement for reduction in the height of the levees in the event that other flood-control works constructed by and in the United States should be built. Painted Rock Dam on the Gila River was authorized for construction by the Flood Control Act of May 17, 1950, with the expectation that that dam would be built and operated to control Gila River floods to a maximum discharge of 36,500 cubic feet per second. With this expectation, the levees were redesigned to provide protection against the design flood from the Gila River and a discharge of 103,500 cubic feet per second on the Colorado River, making a total design flood of 140,000 cubic feet per second in the Yuma Valley below the mouth of the Gila River. Mexico's share of the cost of constructing the flood protective works was computed at $2,126,000, which is subject to recomputation upon actual completion of the levee construction. A credit of $2 million has been established by Mexico and is being drawn upon for construction of the levee system.

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In view of the foregoing, I urge most strongly that the funds required to expedite planning for the construction of Painted Rock Dam be made available to the Corps of Engineers.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary of the Interior.

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